VPDES PERMIT FACT SHEET

This document gives the pertinent information concerning the **reissuance** of the VPDES permit listed below. This permit is being processed as a **minor municipal** permit. The effluent limitations contained in this permit will maintain the Water Quality Standards of 9 VAC 25-260-00 et seq.

The discharge results from the operation of a **0.039 MGD extended aeration wastewater treatment plant** serving Days Inn. This permit action consists of adding effluent limitations for ammonia as nitrogen and revising the special conditions. (SIC Code: 4952)

1. **Facility Name and Address:**
   Days Inn WWTP
   PO Box 1266
   Pulaski, VA 24301
   Location: State Road 100, at Interstate 81, Exit No. 94

2. **Permit No: VA0060321** Existing Permit Expiration Date: May 25, 2008

3. **Owner Contact/ Facility Contacts:**
   Mukesh "Mike" Patel, Owner (203) 288-4560
   Theresa Puckett, Manager (540) 980-2230
   Robert Lawson, Operator (540) 980-2230

4. **Application Complete Date:** November 14, 2007
   Permit Drafted By: Becky L. France, Environmental Engineer Senior
   Date: January 23, 2008
   DEQ Regional Office: West Central Regional Office
   Reviewed By: Kip D. Foster, Water Permit Manager
   Reviewer's Signature: _____ Date: 1/25/08
   Public Comment Period Dates: From 2/5/08 To 3/5/08

5. **Receiving Stream Classification:**

Receiving Stream:	Peak Creek, UT (River Mile: 0.9)		
River Basin:	New River		
River Subbasin:	None		
Section:	2		
Class:	IV		
Special Standards:	v, NEW-5		
7-Day, 10-Year Low Flow:	0 MGD	7-Day, 10-Year High Flow:	0 MGD
1-Day, 10-Year Low Flow:	0 MGD	1-Day, 10-Year High Flow:	0 MGD
30-Day, 5-Year Low Flow:	0 MGD	Harmonic Mean Flow:	0 MGD
Tidal:	No	303(d) Listed:	No

Attachment A contains a copy of the flow frequency determination memorandum.

6. **Operator License Requirements:** IV

7. **Reliability Class:** II

8. **Permit Characterization:**

(X)	Private	( )	Interim Limits in Other Document
( )	Federal	( )	Possible Interstate Effect
( )	State		
( )	POTW		
(X)	PVOTW		

9. **Wastewater Treatment System:** A description of the wastewater treatment system is provided below. See **Attachment B** for the wastewater treatment schematic and **Attachment C** for a copy of the site inspection report. Treatment units associated with the discharge are listed in the table below.

Table I
DISCHARGE DESCRIPTION

Outfall Number	Discharge Source	Treatment (Unit by Unit)	Flow (Design) (MGD)
001	Days Inn WWTP	extended aeration clarification chlorine disinfection dechlorination	0.039

Days Inn operates an extended aeration package plant system. This system has a design capacity of 0.039 MGD and receives wastewater from a 60-room motel. The wastewater works consists of a communitor, diffused aeration system, secondary clarifier, sludge holding tank, liquid chlorinator with baffled chlorine contact chamber, and tablet dechlorinator. After dechlorination, effluent is discharged into an unnamed tributary to Peak Creek.

10. **Sewage Sludge Use or Disposal:** A VPDES Sewage Sludge Permit Application Form was submitted for this facility to address disposal of sewage sludge from the wastewater treatment facility. Sludge is aerobically digested and periodically transported to the local POTW for further treatment.

11. **Discharge Location Description:** A USGS topographic map which indicates the discharge location, any significant dischargers, any water intakes, and other items of interest is included in **Attachment D**. The latitude and longitude of the discharge are N $37^0 2' 7''$, E $80^0 43' 27''$.

Name of Topo: Dublin Number: 082C

12. **Material Storage:** Chlorine granules and sodium sulfite tablets are stored in containers which are kept in a shed.

13. **Ambient Water Quality Information:** Memoranda or other information which helped to develop permit conditions (special water quality studies, STORET data, and any other biological and/or chemical data, etc.) are listed below.

Days Inn WWTP discharges into an unnamed tributary of Peak Creek. Peak Creek flows into Claytor Lake. The discharge is located in the Peak Creek Watershed (VAW-N17R) as described in the 2004 Integrated Report Watershed Assessment Unit Summary (**Attachment E**). The discharge point is located in a segment that has been assessed as nutrient enriched.

Data for STORET Station 9-PKC004.65, were collected in Peak Creek at the State Road 100 Bridge in Pulaski County, upstream from the discharge point. These data are summarized in **Attachment E**.

14. **Antidegradation Review and Comments:** Tier I **X** Tier II ____ Tier III ____

The State Water Control Board's Water Quality Standards includes an antidegradation policy (9 VAC 25-260-30). All state surface waters are provided one of three levels of antidegradation protection. For Tier I or existing use protection, existing uses of the water body and the water quality to protect these uses must be maintained. Tier II water bodies have water quality that is better than the water quality standards. Significant lowering of the water quality of Tier II waters is not allowed without an evaluation of the economic and social impacts. Tier III water bodies are exceptional waters and are so designated by regulatory amendment. The antidegradation policy prohibits new or expanded discharges into exceptional waters.

The antidegradation review begins with Tier determination. Days Inn WWTP discharges into an unnamed tributary of Peak Creek which is not listed on Part I of the 303(d) list. This intermittent tributary flows into a perennial section of Peak Creek. The antidegradation evaluation pertains to the perennial section of Peak Creek which is listed on the 303(d) list. Habitat in this reach has been impacted by the loss of riparian vegetation. The benthic community in the 9-PKC004.65 is considered moderately impacted. Peak Creek in this segment (VAW-N17R) is also listed on Part I of the 303(d) list for exceedance of PCBs in fish tissue. This segment is not supporting the aquatic life, fish consumption, or recreation uses. See **Attachment E** for a summary of data regarding this designation.

Therefore, this section of Peak Creek is classified as a Tier I water, and existing uses of the water body and the water quality to protect these uses must be maintained. Any limitations to be developed for this permit will be developed in accordance with Section 303(d)(4) of the Clean Water Act.

Effluent data used to determine 90th percentile pH and temperature values for the wasteload allocation spreadsheet are included in **Attachment F**. The permit limits are established by determining wasteload allocations that will result in attaining and/or maintaining all water quality criteria that apply. The WLAs will provide for the protection and maintenance of all existing uses. See **Attachment F** for the wasteload allocation spreadsheet. The permit limits are in compliance with antidegradation requirements set forth in 9 VAC 25-260-30. The

antidegradation review was conducted as described in Guidance Memorandum 00-2011, and complies with the antidegradation policy contained in Virginia's Water Quality Standards.

15. **Site Inspection:** Date: 11/1/07 Performed by: Becky L. France
Attachment C contains a copy of the site inspection memorandum.

16. **Effluent Screening and Limitation Development:** DEQ Guidance Memorandum 00-2011 was used in developing all water quality based limits pursuant to water quality standards (9 VAC 25-260-5 et seq.). Refer to **Attachment F** for the wasteload allocation spreadsheet and effluent limit calculations. See **Table II** on pages 13-14 for a summary of limitations and monitoring requirements.

A. **Mixing Zone**

The receiving stream is an intermittent tributary to Peak Creek. A mixing zone was not applicable to determining toxic limitations in the intermittent section. This unnamed tributary reaches Peak Creek approximately 1.8 miles from the discharge point. Peak Creek is shown on the topographic map as perennial. Since the confluence of the unnamed tributary with Peak Creek is considered within the normal pool for Claytor Lake, no mixing zone is allowed.

B. **Effluent Limitations for Conventional Pollutants**

Flow -- The permitted design flow of 0.039 MGD for this facility is taken from the previous permit and the application for the reissuance. In accordance with the current VPDES Permit Manual, flow is to be estimated and reported daily.

pH -- The pH limits of 6.0 S.U. minimum and 9.0 S.U. maximum have been continued from the previous permit. These limits are based upon the water quality criteria in 9 VAC 25-260-50 for Class IV receiving waters and are in accordance with federal technology-based guidelines, 40 CFR Part 133, for secondary treatment. Grab samples shall continue to be collected once per day.

Total Suspended Solids (TSS) -- TSS are technology-based requirements for municipal dischargers with secondary treatment required in accordance with 40 CFR Part 133. These limits of 30 mg/L (4.4 kg/d) monthly average and 45 mg/L (6.6 kg/d) maximum weekly average are the same as the previous permit. Grab samples shall continue to be collected once per month.

Biochemical Oxygen Demand (BOD_5), Dissolved Oxygen (DO) --The final limits for BOD_5 and DO were based upon Streeter Phillips model calculations from 1975. **Attachment G** contains the model results. The Streeter-Phillips Oxygen-Sag model was used to determine the effluent DO that would not violate the water quality standard 1.05 miles downstream at the confluence to Peak Creek. The decay coefficient used in this model is sufficiently low to not result in a significant DO sag throughout this segment.

The 1975 model output demonstrated that an effluent DO of 6.0 mg/L was not adequate to meet an instream water quality standard of 5.0 mg/L.

For the 1998 reissuance, other effluent DO limits were evaluated using the same input coefficients and equations of the 1975 model. The DO was calculated at 0.1-mile intervals to ensure that the DO was self-sustaining over the course of the tributary. An effluent DO concentration of 6.4 mg/L was required to allow 30 mg/L BOD_5 to be discharged. BOD_5 limits from the previous permit of 30 mg/L (4.4 kg/d) monthly average and 45 mg/L (6.6 kg/d) maximum weekly average have been continued. See **Attachment G** for a copy of the model calculations.

Phosphorus -- The Virginia Lake Monitoring Program - 1988 Report for the West Central Region provided the basis for designation of Claytor Lake and tributaries including Peak Creek being designated as nutrient enriched due to phosphorus limited waters.

Since the discharge is into nutrient enriched waters, a previous permit required effluent total phosphorus data which the permittee collected from 1998 to 2001. A summary of the phosphorus data is included in **Attachment E**. No additional phosphorus monitoring will be required with this reissuance.

All dischargers into nutrient enriched waters which meet or exceed the design capacity requirements designated in the State Control Board's Policy for Nutrient Enriched Waters (9 VAC 25-40-00 et seq.) are required to meet monthly average total phosphorus limitations of 2 mg/L. Days Inn WWTP's design capacity (0.039 MGD) is below this threshold. Therefore, phosphorus limitations are not required.

C. Effluent Limitations for Toxic Pollutants

Total Residual Chlorine (TRC) -- Since the discharge is into an intermittent stream, the wasteload allocations are equivalent to the water quality criteria. Based on the WLAs and the Agency's STATS program output, the permit limits of 0.007 mg/L monthly average and 0.009 mg/L maximum weekly average have been continued from the previous permit. See **Attachment F** for the WLA spreadsheet. Grab sampling shall continue to be collected once per day.

Ammonia as Nitrogen -- The need for an ammonia limit has been reevaluated using revised water quality criteria. The acute and chronic water quality criteria and wasteload allocations were calculated and are included in the spreadsheet in **Attachment F**. As recommended in Guidance Memorandum 00-2011, the wasteload allocations and a default ammonia concentration of 9 mg/L were input into the STATS program. The STATS program output indicates that ammonia as nitrogen permit limits of 5.0 mg/L monthly average and 5.0 mg/L maximum weekly average are needed. See **Attachment F** for the STATS program output. A four-year schedule of compliance has been included to

allow the permittee time to meet the ammonia as nitrogen limitations. In accordance with the VPDES Permit Manual, grab samples shall be taken once per month.

17. **Basis for Sludge Use and Disposal Requirements:** Since the facility proposes to pump and haul sludge to a POTW, there are no sludge limits or monitoring requirements.

18. **Antibacksliding Statement:** Since there are no limitations less stringent than the previous permit, the permit limits comply with the antibacksliding requirements of 9 VAC 25-31-220 L of the VPDES Permit Regulation.

19. **Compliance Schedules:** In accordance with 9 VAC 25-31-250 A3, a compliance schedule has been added to the permit as Part I.C to allow the permittee four years to comply with the ammonia as nitrogen limitations.

20. **Special Conditions:** A brief rationale for each special condition contained in the permit is given below.

A. **Additional Total Residual Chlorine (TRC) Limitations and Monitoring Requirements (Part I.B)**

Rationale: This condition requires that the permittee monitor the TRC concentration after chlorine contact. In accordance with 40 CFR 122.41(e), the permittee is required, at all times, to properly operate and maintain all facilities and systems of treatment in order to comply with the permit. These requirements ensure proper operation of chlorination equipment to maintain adequate disinfection.

B. **Schedule of Compliance (Part I.C)**

Rationale: In accordance with 9 VAC 25-31-250 A3, a schedule of compliance has been added to allow the permittee time to meet ammonia as nitrogen limitations.

C. **Compliance Reporting under Part I.A and Part I.B (Part I.D.1)**

Rationale: In accordance with VPDES Permit Regulation, 9 VAC 25-31-190 J4 and 220 I, DEQ is authorized to establish monitoring methods and procedures to compile and analyze data on water quality, as per 40 CFR Part 130, Water Quality Planning and Management, Subpart 130.4. This condition is necessary when toxic pollutants are monitored by the permittee and a maximum level of quantification and/or specific analytical method is required in order to assess compliance with a permit limit or to compare effluent quality with a numeric criterion. This condition also establishes protocols for calculation of reported values.

D. **95% Capacity Reopener (Part I.D.2)**

Rationale: This condition requires that the permittee address problems resulting from high influent flows, in a timely fashion, to avoid non-compliance and water quality problems from plant overloading. This requirement is contained in 9 VAC 25-31-200 B2 of the VPDES Permit Regulations.

E. **CTC, CTO Requirement (Part I.D.3)**

Rationale: This condition is required by Code of Virginia Section 62.1-44.19; Sewage Collection and Treatment Regulations, 9 VAC 25-790.

F. **Operations and Maintenance Manual Requirement (Part I.D.4)**

Rationale: Submittal of the manual is required by the VPDES Permit Regulation (9 VAC 25-31-190 E) to provide an opportunity for review of current and proposed operations of the facility.

During a DEQ inspection in November 2007, effluent leaving the wastewater treatment system was not observed in the outfall pipe which is approximately one mile from the wastewater treatment plant. Infiltration in the discharge pipe is not authorized under the VPDES permit, and this problem must be fixed. As required in the previous permit, the Operations and Maintenance (O&M) Manual shall include a plan of action to stop the infiltration problems and an inspection schedule to identify any future infiltration problems.

Record keeping requirements and forms regarding pumping of the sludge storage basin shall be contained in the O&M Manual. The following information should be retained for at least 5 years:

- The name of the contractor responsible for hauling the waste.
- The date and time the contractor hauled the waste.
- The name and location of the waste disposal facility.
- The quantity of waste disposed.

G. **Licensed Operator Requirement (Part I.D.5)**

Rationale: The VPDES Permit Regulation (9 VAC 25-31-200 D) and the Code of Virginia §54.1-2300 et seq., Rules and Regulations for Waterworks and Wastewater Works Operators (18 VAC 160-20-10 et seq.), require licensure of operators. A Class IV operator is required for this facility.

H. **Reliability Class (Part I.D.6)**

Rationale: A Reliability Class II has been assigned to this facility. Reliability class designations are required by Sewage Collection and Treatment Regulations, 9 VAC 25-790-70 for all municipal facilities.

I. **Nutrient Enriched Waters Reopener (Part I.D.7)**

Rationale: The Policy for Nutrient Enriched Waters (9 VAC 25-40-40) allows reopening of permits for discharges into waters designated as nutrient enriched if total phosphorus and total nitrogen in a discharge potentially exceed specified concentrations. The policy anticipates that future total phosphorus and total nitrogen limits may be needed.

J. **Sludge Reopener (Part I.D.8)**

Rationale: This condition is required by VPDES Permit Regulation, 9 VAC 25-31-220 C for all permits issued to treatment works treating domestic sewage.

K. **Sludge Use and Disposal (Part I.D.9)**

Rationale: VPDES Permit Regulation, 9 VAC 25-31-100 P; 220 B2; and 420 and 720, and 40 CFR Part 503 require all treatment works treating domestic sewage to submit information on sludge use and disposal practices and to meet specified standards for sludge use and disposal. Technical requirements may be derived from the Department of Health's Biosolids Use Regulations, 12 VAC 5-585-10 et seq. In accordance with Guidance Memorandum No. 97-004, this special condition clarifies that the Sludge Management Plan, approved with the reissuance of this permit, is an enforceable condition of the permit.

L. **Total Maximum Daily Load (TMDL) Reopener (Part I.D.10)**

Rationale: Section 303(d) of the Clean Water Act requires that Total Maximum Daily Loads (TMDLs) be developed for streams listed as impaired. This special condition is to allow the permit to be reopened if necessary to bring it into compliance with any applicable TMDL approved for the receiving stream. The reopener recognizes that, according to Section 402(o)(1) of the Clean Water Act, limits and/or conditions may be either more or less stringent than those contained in this permit. Specifically, they can be relaxed if they are the result of a TMDL, basin plan, or other wasteload allocation prepared under Section 303 of the Act.

M. **Treatment Works Closure Plan (Part I.D.11)**

Rationale: Days Inn WWTP is located approximately one mile from public sewer service. In the event that the permittee is able to connect to public sewer with the Town of Pulaski in the future, a closure plan would need to be submitted to DEQ for approval. In

accordance with State Water Control Law § 62.1-44.19, this condition is used to notify the owner of the need for a closure plan where a treatment works is being replaced or is expected to close.

N. **Conditions Applicable to All VPDES Permits (Part II)**

Rationale: VPDES Permit Regulation, 9 VAC 25-31-190 requires all VPDES permits to contain or specifically cite the conditions listed.

21. **Changes to the Permit:**

A. **The following special condition has been deleted from the permit:**

The Bacterial Limitations and Monitoring Requirements Special Condition (old Part I.C) has been deleted because the data required for this special condition have been submitted to demonstrate that the bacteria criteria are met if a given total chlorine residual concentration is maintained.

B. **Special conditions that have been modified from the previous permit are listed below: (The referenced permit sections are for the new permit.)**

1. The Additional Total Residual Chlorine Limitations and Monitoring Requirements Special Condition (Part I.B) has been modified to reflect changes in the Water Quality Standards.

2. The Compliance Reporting under Part I.A and Part I.B Special Condition (Part I.C) has been revised to include information about significant figures.

3. The Operations and Maintenance Manual Special Condition (Part I.D.4) has been revised in accordance with the VPDES Permit Manual.

C. **New special condition added to the permit are listed below:**

1. A Schedule of Compliance (Part I.C) has been added to allow the permittee time to meet the ammonia limitations.

2. A CTC, CTO Requirement Special Condition (Part I.D.3) has been added in accordance with the VPDES Permit Manual.

D. **Permit Limitations and Monitoring Requirements:** See Table III on page 15 for details on changes to the effluent limitations and monitoring requirements.

22. **Variances/Alternate Limits or Conditions:** No variances or alternate limits or conditions are included in this permit. For the application, the permittee requested a waiver to allow the submission of E. coli data collected during the permit term in lieu of fecal coliform data. The

permittee also requested that the grab analysis data for TSS and BOD_5 collected during the permit term be used on the application in lieu of composite samples. These waivers were consistent with current permit requirements. and therefore they were granted.

23. **Regulation of Treatment Works Users (9 VAC 25-31-280 B9):** There are no industrial users contributing to the treatment works.

24. **Public Notice Information required by 9 VAC 25-31-290 D:**

All pertinent information is on file and may be inspected, and arrangements made for copying by contacting Becky L. France at:

Virginia DEQ, West Central Regional Office
3019 Peters Creek Road
Roanoke, VA 24019
540-562-6700
blfrance@deq.virginia.gov

Persons may comment in writing or by e-mail to the DEQ on the proposed permit action and may request a public hearing during the comment period. Comments shall include the name, address, and telephone number of the writer, and shall contain a complete, concise statement of the factual basis for comments. Only those comments received within this period will be considered. The DEQ may decide to hold a public hearing if public response is significant. Requests for public hearings shall state the reason why a hearing is requested, the nature of the issues proposed to be raised in the public hearing, and a brief explanation of how the requester's interests would be directly and adversely affected by the proposed permit action.

Following the comment period, the DEQ will make a determination regarding the proposed permit action. This determination will become effective, unless the DEQ grants a public hearing. Due notice of any public hearing will be given.

25. **303(d) Listed Segments (TMDL):** This facility discharges to an unnamed tributary of Peak Creek. The unnamed stream segment receiving the effluent is not listed on the current 303(d) list; and therefore no Total Maximum Daily Loads (TMDLs) have been or are being developed for this segment.

26. **Additional Comments:**

A. **Reduced Effluent Monitoring:** In accordance with Guidance Memorandum 98-2005, all permit applications received after May 4, 1998, are considered for reduction in effluent monitoring frequency. Only facilities having exemplary operations that consistently meet permit requirements may qualify for reduced monitoring. To qualify for consideration of reduced monitoring requirements, the facility should not have been issued any Warning Letters, Notices of Unsatisfactory Laboratory Compliance, Letter of Noncompliance (LON) or Notices of Violation (NOV), or be under any Consent Orders, Consent Decrees,

Executive Compliance Agreements, or related enforcement documents during the past three years.

The facility received the following Warning Letters within the past three years:

W2007-01-W-1005 no authorized agent signature on DMR, incorrect monitoring period; TSS exceedance
W2006-07-W-1018 lab data deficiencies
W2006-03-W-0001 exceedance of TSS
W2005-07-W-0001 failure to submit E. coli progress report
W2004-07-W-0002 failure to submit E. coli study data; DO limit violation

The facility does not meet the criteria discussed above, and therefore is not eligible for reduced monitoring.

B. **Toxic Pollutant (PCB) Monitoring:** No effluent PCB data is on file. Since the treatment facility has a design capacity under 40,000 gpd and does not treat process wastewater, water quality criteria monitoring have not been required.

C. **Previous Board Action:** None

D. **Staff Comments:** The discharge is not controversial. The discharge is not addressed in any planning document but will be included if applicable when the plan is updated. The permit is being reissued for a period of less than five years to even out the DEQ staff permit writing workload.

Since the 1998 reissuance this facility has had name and ownership changes. For the 1998 reissuance, the facility was Red Carpet Inn. Due to an ownership change it became Pulaski Motel on December 13, 2000, and then changed names to Days Inn on July 18, 2001.

E. **Public Comments:** No comments were received during the comment period.

F. **Tables**

Table I	Discharge Description (Page 2)
Table II	Basis for Limits and Monitoring Requirements (Page 13-14)
Table III	Permit Processing Change Sheet (Page 15)

G. **Attachments**

A. Flow Frequency Memorandum
B. Wastewater Schematic
C. Site Inspection Report
D. USGS Topographic Map

E. Ambient Water Quality Information
- STORET Data (Station 9-PKC004.65)
- 2004 Integrated Report Watershed Assessment Unit Summary (Excerpt)

F. Wasteload and Limit Calculations
- Effluent Data
- Wasteload Allocation Spreadsheet
- STATS Program Results (Ammonia as N)

G. Dissolved Oxygen Model Calculations

H. Public Notice

I. EPA Review Checksheet

Table II-1
BASIS FOR LIMITATIONS – MUNICIPAL

( ) Interim Limitations
(x) Final Limitations

OUTFALL: 001
DESIGN CAPACITY: 0.039 MGD

Effective Dates - From: Compliance with Schedule
To: Expiration Date

PARAMETER	BASIS FOR LIMITS	DISCHARGE LIMITS				MONITORING REQUIREMENTS	
		Monthly Average	Weekly Average	Minimum	Maximum	Frequency	Sample Type
Flow (MGD)	NA	NL	NA	NA	NL	1/Day	Estimate
pH (Standard Units)	1,2	NA	NA	6.0	9.0	1/Day	Grab
BOD_5	1,3	30 mg/L 4.4 kg/d	45 mg/l 6.6 kg/d	NA	NA	1/Month	Grab
Total Suspended Solids	1	30 mg/L 4.4 kg/d	45 mg/l 6.6 kg/d	NA	NA	1/Month	Grab
Total Residual Chlorine	2	0.007 mg/L	0.009 mg/L	NA	NA	1/Day	Grab
Dissolved Oxygen	2,3	NA	NA	6.4 mg/L	NA	1/Day	Grab
Ammonia as Nitrogen	2	5.0 mg/L	5.0 mg/L	NA	NA	1/Month	Grab

NA = Not Applicable
NL = No Limitations; monitoring only

The basis for the limitations codes are:
1. Federal Technology-Based Secondary Treatment Regulation (40 CFR Part 133)
2. Water Quality Criteria
3. Regional Water Quality Model

Table II-2
BASIS FOR LIMITATIONS – MUNICIPAL

(x) Interim Limitations
( ) Final Limitations

OUTFALL: 001
DESIGN CAPACITY: 0.039 MGD

Effective Dates - From: Effective Date
To: Compliance with Schedule

PARAMETER	BASIS FOR LIMITS	DISCHARGE LIMITS				MONITORING REQUIREMENTS	
		Monthly Average	Weekly Average	Minimum	Maximum	Frequency	Sample Type
Flow (MGD)	NA	NL	NA	NA	NL	1/Day	Estimate
pH (Standard Units)	1,2	NA	NA	6.0	9.0	1/Day	Grab
BOD_5	1,3	30 mg/L 4.4 kg/d	45 mg/l 6.6 kg/d	NA	NA	1/Month	Grab
Total Suspended Solids	1	30 mg/L 4.4 kg/d	45 mg/l 6.6 kg/d	NA	NA	1/Month	Grab
Total Residual Chlorine	2	0.007 mg/L	0.009 mg/L	NA	NA	1/Day	Grab
Dissolved Oxygen	2,3	NA	NA	6.4 mg/L	NA	1/Day	Grab

NA -- Not Applicable
NL -- No Limitations; monitoring only

The basis for the limitations codes are:
1. Federal Technology-Based Secondary Treatment Regulation (40 CFR Part 133)
2. Water Quality Criteria
3. Regional Water Quality Model

Table III
PERMIT PROCESSING CHANGE SHEET

LIMITS AND MONITORING SCHEDULE:

Outfall No.	Parameter Changed	Monitoring Requirement Changed		Effluent Limits Changed		Reason for Change	Date
		From	To	From	To		
001	Ammonia as Nitrogen	NA	1/Month	NA	5.0 mg/L monthly average & 5.0 mg/L maximum weekly average	Ammonia as nitrogen limits have been added based upon a statistical analysis using a 30-day average and expressed as a monthly average and maximum weekly average.	12/10/07

Attachment A

Flow Frequency Memorandum

MEMORANDUM

DEPARTMENT OF ENVIRONMENTAL QUALITY - WATER DIVISION
3019 Peters Creek Road Roanoke, Virginia 24017

SUBJECT: Flow Frequency Determination
Days Inn WWTP (VA0060321) - Reissuance

TO: Permit File

FROM: Becky L. France, Environmental Engineer Senior BLF

DATE: December 7, 2007

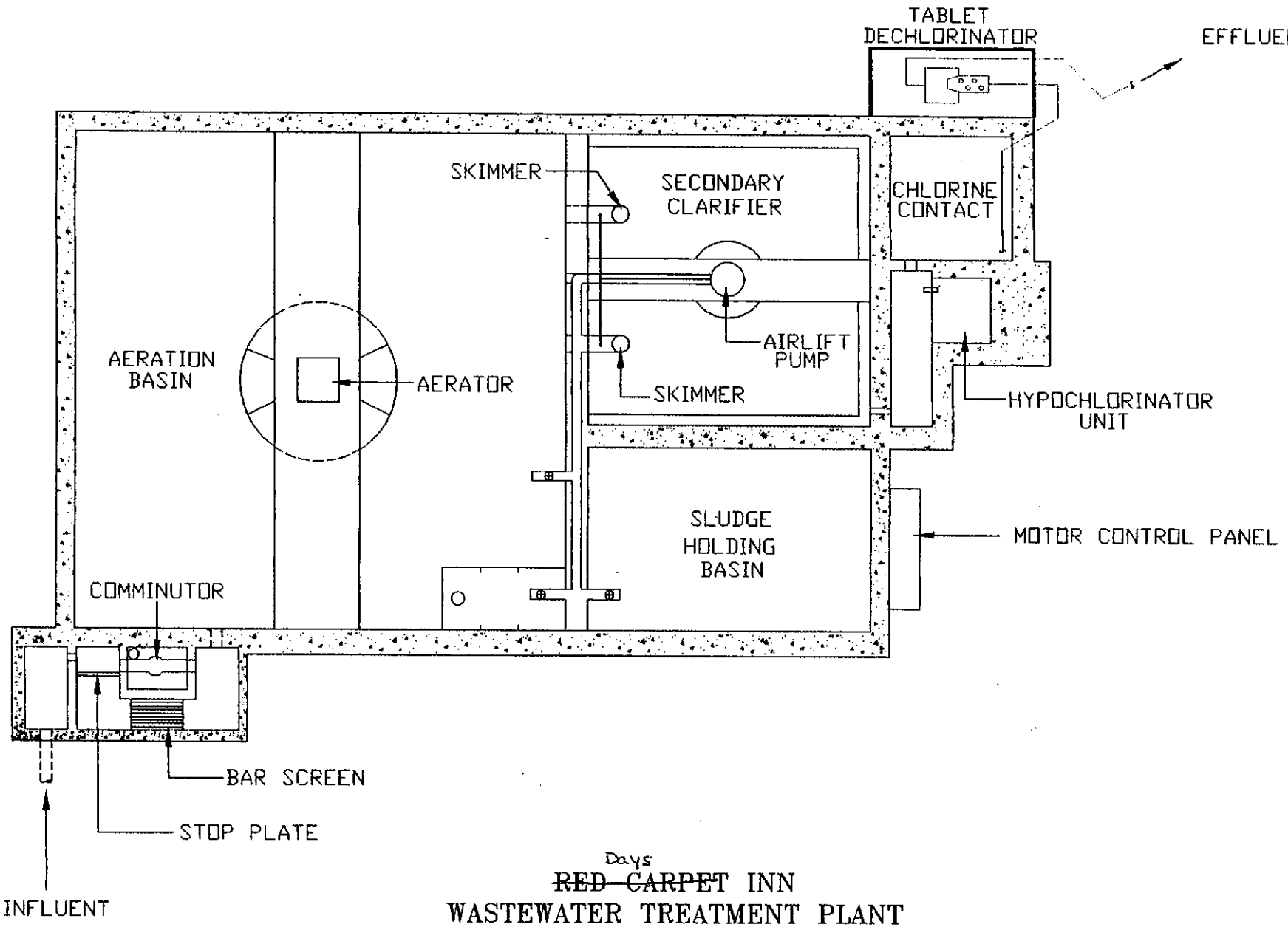
Days Inn WWTP discharges to an unnamed tributary to Peak Creek in Pulaski, Virginia. Flow frequencies are required at this site to develop the VPDES permit.

The values of the discharge point were determined by inspection of the USGS Dublin Quadrangle topographical map which shows the receiving stream as intermittent at the discharge point. The flow frequencies for intermittent streams are 0.0 cfs for the 1Q10, 7Q10, 30Q5, high flow 1Q10, high flow 7Q10, and the harmonic mean.

The receiving stream is intermittent for 1.8 miles before merging with the perennial section of Peak Creek. The confluence of the unnamed tributary and Peak Creek is shown to be within the normal pool for Claytor Lake. Dilution ratios should be used to assess the impacts of the Days Inn WWTP discharge on the water quality in Claytor Lake.

Attachment B

Wastewater Schematic



Days
~~RED CARPET~~ INN
WASTEWATER TREATMENT PLANT

FIGURE 1

SCALE:NO SCALE
JOB NO.:11903

REVISED: AUG. 15, 1996
REDCARP\WWTP

OLVER
INCORPORATED

Attachment C

Site Inspection Report

MEMORANDUM

DEPARTMENT OF ENVIRONMENTAL QUALITY
West Central Regional Office

3019 Peters Creek Road Roanoke, VA 24019

SUBJECT: Site Inspection Report for Days Inn
Reissuance of VPDES Permit No. VA0060321

TO: Permit File

FROM: Becky L. France, Environmental Engineer Senior

CC: Samuel C. Hale, Environmental Inspector Supervisor

DATE: November 2, 2007

On November 1, 2007, a site visit was conducted at the wastewater works at Days Inn. Treatment plant operator, Mr. Robert Lawson, was present at the site inspection. The wastewater treatment works serves a 60-room motel. The facility is served by county water.

Location of Discharge/ Description of Receiving Waters

Effluent from the wastewater works is piped about 1 mile to a 6-inch pipe which is on the edge of an unnamed tributary of Peak Creek. The discharge point is below a residence and a fenced pasture. At the time of the site visit, there was no discharge from the pipe into the tributary, but a small amount of effluent was being discharged from the dechlorination unit into the pipe. Mr. Lawson said there is some flow at the outfall during greater wastewater generation periods but no flow from the outfall when there is a very low discharge from the treatment works. Leakage from this pipe needs to be repaired. Mr. Lawson said that he is planning to use dye to identify where the leak is occurring.

Peak Creek is about a mile from the outfall. Peak Creek flows into Claytor Lake. The Peak Creek steam bed is composed of silt with some pebbles.

Familiarization with Plant Operations

The extended aeration system consists of a comminutor, bar screen, aeration basin, liquid chlorinator with baffled chlorine contact chamber, and tablet dechlorinator. Materials trapped in the bar screen are removed daily, stored in an open container, and taken to a landfill periodically.

The wastewater flows into a 43,085 gallon basin with a blower and diffused aeration system. The aerator is currently operating at alternating 30-minute intervals each hour. At the time of the site visit, the basin had a small amount of light crisp foam but no dead spots. The activated sludge was a chocolate color and had a musty odor. According to Mr. Lawson, the hopper is scraped and the clarifier skimmed on a daily basis. The clarifier tank has two air pumps for sludge return. Sludge is wasted periodically from the clarifier to a 9,425 gallon sludge holding tank. Sludge is generally pumped annually as needed and transported by a contract waste hauler to a conventional wastewater treatment plant.

Chlorine granules and sodium sulfite tables are stored in a shed. A chlorine solution is mixed and fed into the system from a 50-gallon polyethylene plastic container. The chlorine solution is gravity dripped into the wastewater stream. After flowing through a contact tank with three plywood baffles, the wastewater is

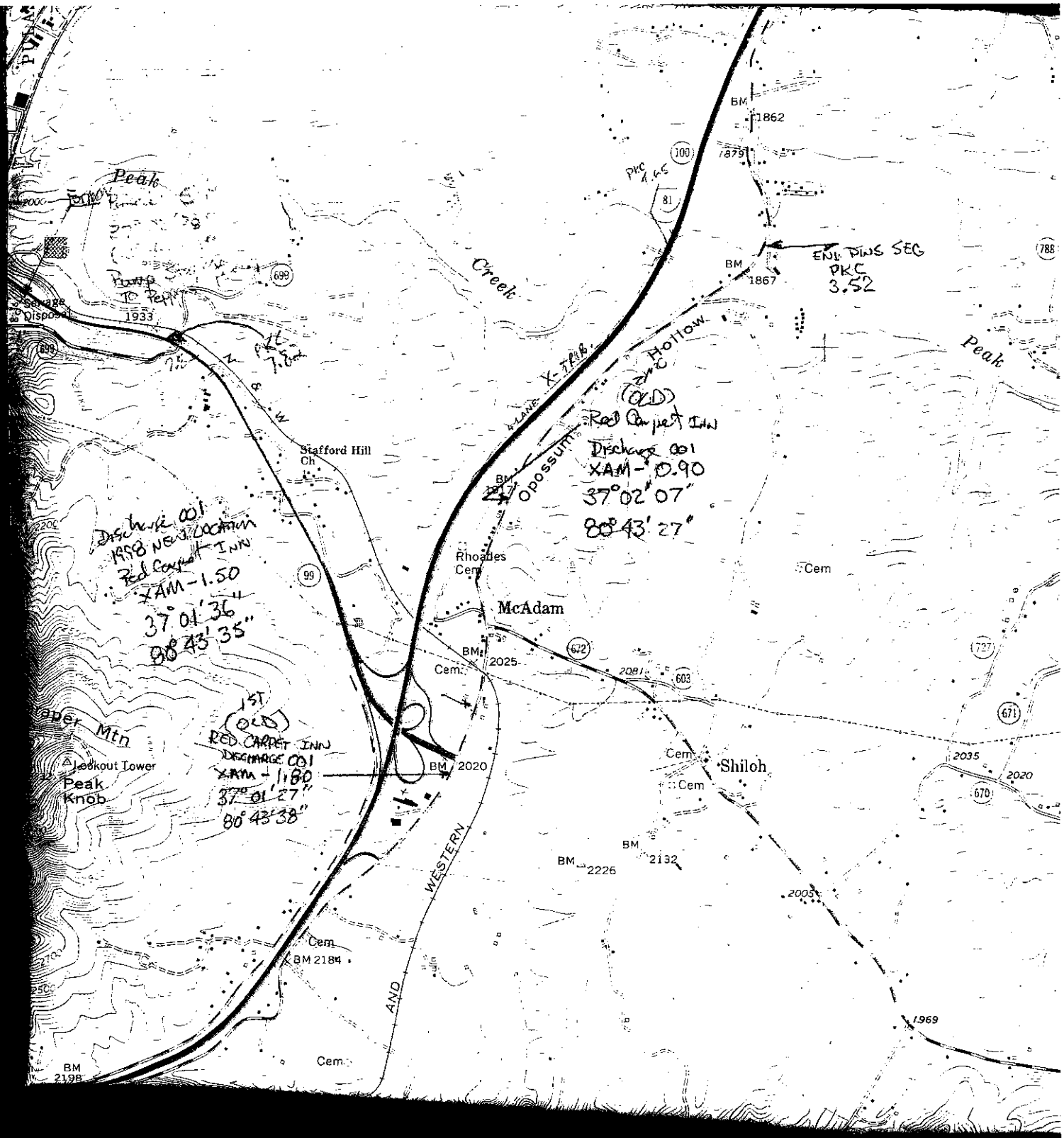
dechlorinated via sodium sulfite tablets. At the time of the site visit, three tubes of sodium sulfite tablets were being used.

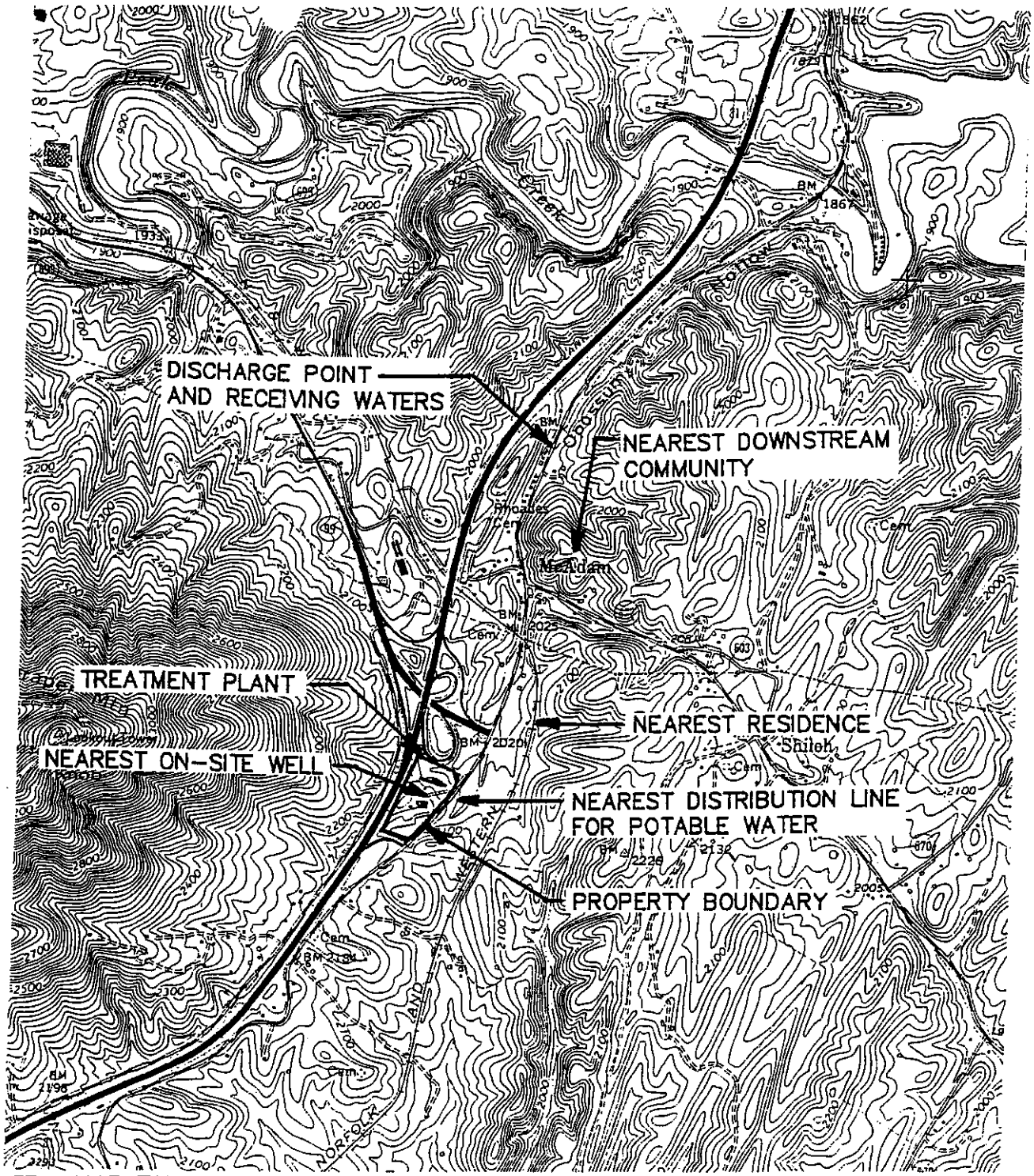
Flow is measured with a water meter and adjusted to reflect the estimated wastewater flow. The wastewater discharge fluctuates with motel usage which is highly variable. Water usage records over the past day indicated an estimated flow of 400 gallons which was well below the treatment capacity.

Effluent total residual chlorine (TRC), pH, and dissolved oxygen are tested onsite at the discharge from the dechlorination unit. Total suspended solids (TSS) and biochemical oxygen demand (BOD_5) are collected by plant personnel and shipped to a contract laboratory for analyses.

Attachment D

USGS Topographic Map


Peak
Creek
Pump To Pen 1933
Sewage Disposal
Stafford Hill Ch
N & W
4-LANE
X-TRIB.
Opossum
Hollow
Peak
ENL DIVS SEC PKC 3.52
(OLD) Red Carpet Inn
Discharge 001
XAM - 0.90
37°02'07"
80°43'27"
Discharge 001
1998 NEW LOCATION
Red Carpet INN
XAM - 1.50
37°01'36"
80°43'35"
1ST (OLD)
RED CARPET INN
DISCHARGE 001
XAM - 1.80
37°01'27"
80°43'38"
Rhoades Cem
McAdam
Cem
BM 2025
BM 2020
Shiloh
BM 2132
BM 2226
BM 2184
Lookout Tower
Peak Knob
WESTERN
AND
1862
1879
1867
1933
2025
2081
2035
2020
2005
1969



NOTE: MAP TAKEN FROM U.S.G.S. TOPO DUBLIN, VA. QUAD. DATED: 1984

Days Inn

~~RED CARPET INN AND RESTAURANT~~

I-81 AT EXIT 94 PULASKI, VA.

FIGURE 1

1" ≈ 2000'
JOB NO.: 50209.01

NOV. 20, 1997
50209.01\SITELOC

OLVER INCORPORATED

Attachment E

Ambient Water Quality Information

- **STORET Data (Station 9-PKC004.65)**
- **2004 Integrated Report Watershed Assessment Unit Summary (Excerpt)**

VAW-N17R
Station ID 9-PKC004.65 (Peak Creek -- Road 100 Bridge -- Pulaski County) (upstream of discharge)

Collection Date Time	Temp Celsius	Do Probe (mg/L)	Field pH (S.U.)	Nitrogen Total (MG/L as N)	Ammonia as N, Total (mg/L as N)	Phosphorus Total (mg/L as P)	Hardness Total (mg/L as CaCO3)	Fecal Coliform,Membr Filter	E. coli - MTEC-MFN0/100ML
2/14/2000 10:10	5.3	11.4	7.45	NULL	<0.04	0.1	73.3	<100	NULL
2/29/2000 9:20	8.7	9.8	7.65	NULL	<0.04	0.02	106	<100	NULL
3/29/2000 11:15	9.9	11.3	8.13	NULL	<0.04	0.02	100	<100	NULL
4/6/2000 10:10	10.9	9.8	7.58	NULL	<0.04	0.02	63	100	NULL
5/24/2000 10:05	21.7	8.3	8.3	NULL	0.05	0.04	94	<100	NULL
6/26/2000 10:30	25	8.6	8.14	NULL	0.04	0.05	130	<100	NULL
7/26/2000 11:15	23.2	5.6	7.86	NULL	0.05	0.04	56.5	<100	NULL
8/16/2000 10:10	25.7	8.1	8.61	NULL	<0.04	0.03	54	<100	NULL
9/19/2000 10:35	19.6	7.9	7.76	NULL	<0.04	0.02	122	700	NULL
10/18/2000 9:30	15.2	8.2	7.73	NULL	<0.04	0.03	140	400	NULL
11/29/2000 9:00	5.3	11.4	8.84	NULL	<0.04	0.5	119	<100	NULL
12/27/2000 13:30	4	10.4	7.8	NULL	0.04	0.03	62.8	<100	NULL
1/17/2001 10:30	1.7	12.1	8.04	NULL	0.07	0.02	86.8	<100	NULL
2/6/2001 13:00	5	13.3	8.5	NULL	<0.04	0.02	165	<100	NULL
3/8/2001 11:50	4.8	14.2	8.63	NULL	<0.04	0.01	115	<100	NULL
4/10/2001 9:30	17.1	9	7.76	NULL	0.04	0.02	119	100	NULL
5/17/2001 10:30	13.4	7.85	9.24	NULL	0.06	0.13	24.9	7700	NULL
6/25/2001 9:00	24.4	7.53	8.2	NULL	0.05	0.03	74.7	<100	NULL
7/17/2001 12:30	26.9	9.67	9.13	NULL	<0.04	0.04	61.8	<100	NULL
8/15/2001 11:40	25.9	7.85	8.76	NULL	0.04	0.07	67.4	<100	NULL
9/11/2001 11:30	21.9	8.41	8.35	NULL	<0.04	0.02	138	300	NULL
10/25/2001 13:00	16.3	11.04	8.75	NULL	<0.04	0.03	129	<100	NULL
11/27/2001 10:45	10.3	10.16	8.21	NULL	<0.04	0.07	173	200	NULL
12/18/2001 12:30	9	9.17	8.29	NULL	<0.04	0.04	160	100	NULL
1/23/2002 10:45	4.6	12.25	8.31	NULL	<0.04	0.04	181.1	<100	NULL
2/25/2002 13:10	8.9	11.36	8.37	NULL	<0.04	0.03	181	<100	NULL
3/14/2002 15:45	12.5	12.88	8.61	NULL	<0.04	0.02	168	<100	NULL
4/30/2002 9:50	15.35	10.36	8.48	NULL	<0.04	0.02	102	<100	NULL
5/30/2002 10:15	22.4	7.94	7.91	NULL	0.04	0.03	151	300	NULL
6/25/2002 9:00	24.87	6.39	7.75	NULL	0.08	0.03	127	<100	NULL
7/30/2002 10:20	25.46	6.49	7.68	NULL	0.05	0.03	126	100	NULL
8/20/2002 15:30	27.74	8.79	8.41	NULL	<0.04	0.04	192	100	NULL
9/19/2002 14:30	25.58	7.26	8.12	NULL	0.08	0.06	123	<100	NULL
11/21/2002 10:50	8.36	9.56	7.64	NULL	<0.04	0.02	126	<100	NULL
12/17/2002 13:55	5.2	11.1	7.1	NULL	<0.04	0.01	82.1	<100	NULL
1/22/2003 13:35	3.33	11.25	7.56	NULL	0.04	0.01	186	<100	NULL
2/11/2003 10:00	2.5	13.25	8.44	NULL	<0.04	0.02	157	<100	NULL
3/18/2003 9:55	12.15	9.86	8.06	NULL	<0.04	0.01	160	100	NULL
4/10/2003 10:15	8.11	10.86	7.8	NULL	<0.04	0.01	55.1	200	NULL
6/12/2003 9:55	19.6	7.14	7.76	NULL	<0.04	0.01	109	1200	NULL
8/19/2003 8:00	23.9	8.1	8.71	0.84	NULL	0.03	NULL	NULL	10
10/27/2003 10:30	13.41	8.19	7.73	0.77	NULL	0.02	NULL	NULL	300
12/22/2003 12:30	8	12.3	7.9	0.79	NULL	0.01	NULL	NULL	20
2/18/2004 13:00	7.29	12.53	8.33	1.06	NULL	0.01	NULL	<QL	<25
4/21/2004 10:35	16.47	9.4	7.85	1.04	NULL	0.02	NULL		120
6/22/2004 12:30	25.3	7.28	8.1	0.78	NULL	0.05	NULL	<QL	<25
8/25/2004 9:20	23.6	6.36	7.92	0.93	NULL	0.05	NULL	100	180

VAW-N17R
Station ID 9-PKC004.65 (Peak Creek -- Road 100 Bridge -- Pulaski County) (upstream of discharge)

Collection Date Time	Temp Celsius	Do Probe (mg/L)	Field pH (S.U.)	Nitrogen Total (MG/L as N)	Ammonia as N, Total (mg/L as N)	Phosphorus Total (mg/L as P)	Hardness Total (mg/L as CaCO3)	Fecal Coliform,Membr Filter	E. coli - MTEC-MFN0/100ML
10/27/2004 13:20	14.3	7.96	7.17	0.93	NULL	0.03	NULL	25	100
12/1/2004 15:15	9.67	10.03	8.01	1.11	NULL	0.02	NULL	120	250
2/17/2005 12:25	6.66	NULL	7.9	0.74	NULL	0.01	NULL	<25	<25
4/19/2005 12:10	18.48	9.61	8.22	1	NULL	0.04	NULL	<25	<25
6/7/2005 14:00	22.7	8.2	8	0.95	NULL	0.02	NULL	25	25
8/10/2005 12:30	27.8	7.4	8.9	0.56	NULL	0.03	NULL	50	50
10/27/2005 11:30	11.8	8.6	8.1	0.8	NULL	0.02	NULL	50	25
12/19/2005 13:00	4.5	10.8	8.3	0.96	NULL	0.02	NULL	<25	<25
2/21/2006 12:00	5.9	12.1	8.3	0.78	NULL	0.02	NULL	<25	25
4/6/2006 10:50	12.6	9.8	8.1	0.62	NULL	0.03	NULL	<25	<25
6/8/2006 12:00	22	7.5	7.5	0.76	NULL	0.04	NULL	50	<25
8/14/2006 12:45	26.9	7.3	8.5	0.55	NULL	0.04	NULL	<25	<25
10/5/2006 11:55	20	12	8.4	0.54	NULL	0.03	NULL	<25	25
12/14/2006 11:10	5.5	11.1	8.3	1.25	NULL	0.02	NULL	25	<25
1/17/2007 9:55	6.4	9.5	8.2	1.16	NULL	0.01	NULL	50	25
3/20/2007 11:25	8.5	10.8	8	0.87	NULL	0.01	NULL	120	50
5/9/2007 10:20	18.9	10.9	7.6	1.44	NULL	0.04	NULL	75	<25
7/17/2007 9:35	23.8	6.2	7.8	0.85	NULL	0.03	NULL	75	50
9/27/2007 8:30	21.2	6.2	6.9	0.78	NULL	NULL	NULL	25	<25
11/29/2007 9:00	7	11.3	6.6	NULL	NULL	NULL	NULL	NULL	<25

Mean Hardness 117 mg/L

VAW-N17R
STORET Station 9-PKC004.65

Peak Creek Dissolved Metals Data (ug/l)

Collection Date Time	As	Cd	Cr	Cu	Pb	Mn	Ni	Ag	Zn	Sb	Se	Hg
11/20/1997 12:05	0.41	<0.1	0.22	1.5	<0.1	26.6	0.62	<0.1	21.5	<0.1	0.9	<2

2004 Integrated Report Watershed Assessment Unit Summary

Watershed ID: **VAW-N17R** PEAK CREEK

Assessment Unit (AU)	TMDL ID	Overall AU Category	Stream & AU Description	AU Size
VAW-N17R_PKC01A00	**VAW-N17R-01**	5A	This portion of Peak Creek begins just downstream of the Rt. 99/Norfolk Southern crossing extending downstream to the inundation of Peak Creek in Claytor Lake.	2.84 MILES
VAW-N17R_PKC02A00	**VAW-N17R-01**	5A	The segment begins downstream of the Washington Ave. Bridge (~0.20 miles) and extends on downstream to just below the Rt. 99 Bridge/Norfolk Southern Railway crossing of Peak Creek.	1.62 MILES
VAW-N17R_PKC03A00		2B	This portion of Peak Creek extends from the Magnox, Inc. outfall on down ~0.20 miles downstream of the Washington Ave. Bridge.	0.88 MILES
VAW-N17R_PKC04A00		2B	The segment extends from the mouth of Hogan Creek downstream to just above the Magnox. Inc. outfall on Peak Creek.	2.10 MILES
VAW-N17R_PKC05A00		3A	This section contains the Hogan Creek free flowing drainage and the remainder of the Peak Creek mainstem and tributaries upstream to Gatewood Reservoir Dam within the PWS designated section.	20.91 MILES
VAW-N17R_PKC06A00		3A	These waters are all immediate tributaries to Gatewood Reservoir excluding Peak Creek upstream to its inundation. All PWS designated waters.	6.39 MILES
VAW-N17R_PKC07A00		3A	These waters are the headwaters of Peak Creek, mainstem and tributaries downstream to Peak Creek's inundation at Gatewood Reservoir.	10.30 MILES
VAW-N17R_PKC08A04		2A	Peak Creek mainstem headwaters downstream to an unnamed tributary just downstream of the Rt. 712 crossing (37°02'03" / 80°55'13").	5.39 MILES
VAW-N17R_PLK01A04		2B	Pondlick Branch from its headwaters downstream to its mouth on Peak Creek.	3.45 MILES
VAW-N17R_TCK01A00		3A	Tract Fork mainstem from its confluence with Peak Creek upstream to the mouth of Pondlick Branch.	1.26 MILES
VAW-N17R_TCK02A00		3A	Tract Fork mainstem from the confluence of Pondlick Branch upstream to the mouth of Altoona Branch.	6.68 MILES
VAW-N17R_TCK03A00		3A	Tract Fork mainstem from the confluence of Altoona Branch upstream to its headwaters	5.04 MILES
VAW-N17R_XAG01A02		2A	An unnamed tributary to Peak Creek not within WQS designated public water supply (PWS) sections. The unnamed tributary mouth is located @37°02'47" / 80°46'03".	3.14 MILES
VAW-N17R_ZZZ01A00		3A	Tributaries to Peak Creek not within WQS designated public water supply (PWS) sections. These include Thronsprings Branch, and tributaries to Tract Fork .	59.66 MILES
VAW-N17R_ZZZ02A02		3A	An unnamed tributary to Peak Creek within the WQS designated public water supply (PWS) section.	1.18 MILES

2004 Integrated Report Watershed Assessment Unit Summary

VAW-N17R

PEAK CREEK

Total Assessment Units: 15

OVERALL 2004 WATERSHED SUMMARY *

Total Watershed Size: 130.84 MILES

Federal Category 5 Waters

Waters 'Impaired' requiring TMDL Studies

	'Impaired' for one or more parameters	Believed Natural	One TMDL complete one or more remains
(VA Subcategories)	**5A**	**5C**	**5D**
Impaired Waters:	4.46		

Federal Categories 4A & 4C Waters

No further TMDL Study required

	Waters 'Impaired' TMDL complete	Waters 'Impaired' Natural
(VA Subcategories)	**4A**	**4C**

Federal Category 3 Waters

non-DEQ Data Method Collection and/or Laboratory not QA/QC'd

	No Data	Existing Data Insufficient to Assess	Use Not Attained 'Waters of Concern'	Use Attained
(VA Subcategories)	**3A**	**3B**	**3C**	**3D**
Insufficient Data:	111.42			

Federal Category 2 Waters

	Fully Supports Assessed Uses	Fully Supports but are 'Waters of Concern'
(VA Subcategories)	**2A**	**2B**
Support Some Uses:	8.53	6.43

Federal Category 1 Waters

	'Fully Supports all Uses'
(VA Subcategories)	**1**
Supports All Uses:	

*** Note: Totals are based on Overall AU Category.**

2004 Use Attainment by Assessment Units (AU)

Watershed ID: VAW-N17R

Total Watershed Size: 130.84 M

AU ID: **VAW-N17R_ZZZ02A02** **1.18** M *AU Overall Category:* **3A**

LOCATION: An unnamed tributary to Peak Creek within the WQS designated public water supply (PWS) section.

State TMDL ID	*Use*	*WOS Attainment*	*303(d) Impairment Initial List Year*
	Aquatic Life	Not Assessed	
	Fish Consumption	Not Assessed	
	Public Water Supply	Not Assessed	
	Recreation	Not Assessed	
	Wildlife	Not Assessed	

WQS Class IV Sec. 2m PWS NEW-5 No current data. These waters are not assessed. No VDH fish consumption or drinking water advisories.

AU ID: **VAW-N17R_ZZZ01A00** **59.66** M *AU Overall Category:* **3A**

LOCATION: Tributaries to Peak Creek not within WQS designated public water supply (PWS) sections. These include Thronsprings Branch, and tributaries to Tract Fork .

State TMDL ID	*Use*	*WOS Attainment*	*303(d) Impairment Initial List Year*
	Aquatic Life	Not Assessed	
	Fish Consumption	Not Assessed	
	Recreation	Not Assessed	
	Wildlife	Not Assessed	

WQS Class IV Sec. 2 v NEW-5 No current data. These waters are not assessed. No VDH fish consumption advisory.

AU ID: **VAW-N17R_XAG01A02** **3.14** M *AU Overall Category:* **2A**

LOCATION: An unnamed tributary to Peak Creek not within WQS designated public water supply (PWS) sections. The unnamed tributary mouth is located @37°02'47" / 80°46'03".

State TMDL ID	*Use*	*WOS Attainment*	*303(d) Impairment Initial List Year*
	Aquatic Life	Fully Supporting	
	Fish Consumption	Not Assessed	
	Recreation	Not Assessed	
	Wildlife	Fully Supporting	

WQS Class IV Sec. 2 v,NEW-5
Assessment basis: DEQ station 9-XAG000.25 (AQ) single observations of field parameters are not assessed. 9-XAG000.25- Single observations of FC, DO, Temp, pH & TP; No exceedances- not assessed. Single NH3-N sample- Full Support. No VDH fish consumption advisory.

AU ID: **VAW-N17R_TCK03A00** **5.04** M *AU Overall Category:* **3A**

LOCATION: Tract Fork mainstem from the confluence of Altoona Branch upstream to its headwaters

State TMDL ID	*Use*	*WOS Attainment*	*303(d) Impairment Initial List Year*
	Aquatic Life	Not Assessed	
	Fish Consumption	Not Assessed	
	Recreation	Not Assessed	
	Wildlife	Not Assessed	

WQS Class VI Sec. 2 v NEW-5 No current data. These waters are not assessed. No VDH fish consumption advisory.

AU ID: **VAW-N17R_TCK02A00** **6.68** M *AU Overall Category:* **3A**

LOCATION: Tract Fork mainstem from the confluence of Pondlick Branch upstream to the mouth of Altoona Branch.

State TMDL ID	Use	WOS Attainment	303(d) Impairment Initial List Year
	Aquatic Life	Not Assessed	
	Fish Consumption	Not Assessed	
	Recreation	Not Assessed	
	Wildlife	Not Assessed	

WQS Class IV Sec. 2 v NEW-5 No current data. These waters are not assessed. No VDH fish consumption advisory.

AU ID: **VAW-N17R_TCK01A00** **1.26** M *AU Overall Category:* **3A**

LOCATION: Tract Fork mainstem from its confluence with Peak Creek upstream to the mouth of Pondlick Branch.

State TMDL ID	Use	WOS Attainment	303(d) Impairment Initial List Year
	Aquatic Life	Not Assessed	
	Fish Consumption	Not Assessed	
	Recreation	Not Assessed	
	Wildlife	Not Assessed	

WQS Class IV Sec. 2 v NEW-5 No current data. These waters are not assessed. No VDH fish consumption advisory.

AU ID: **VAW-N17R_PLK01A04** **3.45** M *AU Overall Category:* **2B**

LOCATION: Pondlick Branch from its headwaters downstream to its mouth on Peak Creek.

State TMDL ID	Use	WOS Attainment	303(d) Impairment Initial List Year
	Aquatic Life	Fully Supporting	
	Fish Consumption	Not Assessed	
	Recreation	Not Assessed	
	Wildlife	Not Assessed	

WQS Class IV Sec. 2 v NEW-5
Assessment basis: USFS MAIS stations 8092 and 8093 8092- Bio 'SI'; slight impairment. Single Survey '01 (MAIS score 15 Good). 8093- Bio 'SI'; slight impairment. Single Survey '01 (MAIS score 16 Good).

AU ID: **VAW-N17R_PKC08A04** **5.39** M *AU Overall Category:* **2A**

LOCATION: Peak Creek mainstem headwaters downstream to an unnamed tributary just downstream of the Rt. 712 crossing (37°02'03" / 80°55'13").

State TMDL ID	Use	WOS Attainment	303(d) Impairment Initial List Year
	Aquatic Life	Fully Supporting	
	Fish Consumption	Not Assessed	
	Public Water Supply	Not Assessed	
	Recreation	Not Assessed	
	Wildlife	Not Assessed	

WQS Class VI Sec. 2d PWS,v,NEW-5
Assessment basis: USFS MAIS station 7020. 7020- Bio 'NI'; no impairment. Single Survey '01 (MAIS score 17 Very Good).

2004 Use Attainment by Assessment Units (AU)

AU ID: **VAW-N17R_PKC07A00** **10.30** M *AU Overall Category:* **3A**

LOCATION: These waters are the headwaters of Peak Creek, mainstem and tributaries downstream to Peak Creek's inundation at Gatewood Reservoir.

State TMDL ID	*Use*	*WOS Attainment*	*303(d) Impairment Initial List Year*
	Aquatic Life	Not Assessed	
	Fish Consumption	Not Assessed	
	Public Water Supply	Not Assessed	
	Recreation	Not Assessed	
	Wildlife	Not Assessed	

WQS Class VI Sec. 2d PWS v NEW-5 No current data. These waters are not assessed. No VDH fish consumption or drinking water advisories.

AU ID: **VAW-N17R_PKC06A00** **6.39** M *AU Overall Category:* **3A**

LOCATION: These waters are all immediate tributaries to Gatewood Reservoir excluding Peak Creek upstream to its inundation. All PWS designated waters.

State TMDL ID	*Use*	*WOS Attainment*	*303(d) Impairment Initial List Year*
	Aquatic Life	Not Assessed	
	Fish Consumption	Not Assessed	
	Public Water Supply	Not Assessed	
	Recreation	Not Assessed	
	Wildlife	Not Assessed	

WQS Class IV Sec. 2d PWS v NEW-5 No current data. These waters are not assessed. No VDH fish consumption or drinking water advisories.

AU ID: **VAW-N17R_PKC05A00** **20.91** M *AU Overall Category:* **3A**

LOCATION: This section contains the Hogan Creek free flowing drainage and the remainder of the Peak Creek mainstem and tributaries upstream to Gatewood Reservoir Dam within the PWS designated section.

State TMDL ID	*Use*	*WOS Attainment*	*303(d) Impairment Initial List Year*
	Aquatic Life	Not Assessed	
	Fish Consumption	Not Assessed	
	Public Water Supply	Not Assessed	
	Recreation	Not Assessed	
	Wildlife	Not Assessed	

WQS Class IV Sec. 2d PWS v NEW-5 No current data. These waters are not assessed. No VDH fish consumption or drinking water advisories.

AU ID: **VAW-N17R_PKC04A00** **2.10** M *AU Overall Category:* **2B**

LOCATION: The segment extends from the mouth of Hogan Creek downstream to just above the Magnox. Inc. outfall on Peak Creek.

State TMDL ID	*Use*	*WOS Attainment*	*303(d) Impairment Initial List Year*
	Aquatic Life	Fully Supporting	
	Fish Consumption	Not Assessed	
	Recreation	Fully Supporting	
	Wildlife	Fully Supporting	

WQS Class IV Sec. 2 v NEW-5
Assessment basis: DEQ station 9-PKC011.11 (AQ, RBPII) 9-PKC011.11- Bio 'NI; no impairment. RBP II 5 year score 76.44; 2 year score 100. Both 1999 and spring 2000 surveys were poor relative to reference conditions; however, rainfall in the watershed was much lower than normal and the reference at that time (Sinking Creek, 9-SNK012.06), is a stream that does not appear to be very susceptible to drought. In 2002, the reference site for the three Peak Creek Biomonitoring stations was changed to 9-PKC011.11 since this station has been determined to be minimally impacted relative to the two downstream sites. Instream habitat scores are mostly in the optimal range. Riparian vegetation is impacted with narrow buffers immediately upstream as a result of residential land use. 9-PKC011.11- No excursions are found for DO, Temp, pH, TP or NH3-N. One FC observation exceeds the WQS 400 cfu/100 ml instantaneous criterion at 600 from 17 samples- Fully Supporting. AQ sediment exceedances of PEC SVs for lead (Pb) SV of 128 ppm, zinc (Zn) SV of 459 ppm, DDD SV of 28 ppb and DDE SV 31.3 ppb: Metals- 1999 Pb at 420 and Zn at 1520 ppm, 1998 Pb at 220 and Zn at 1080 ppm; Organics- 1999 DDD at 30 and DDE at 40 ppb- 'Observed Effect'. No VDH fish consumption advisory.

AU ID: ***VAW-N17R_PKC03A00*** **0.88** M *AU Overall Category:* **2B**

LOCATION: This portion of Peak Creek extends from the Magnox, Inc. outfall on down ~0.20 miles downstream of the Washington Ave. Bridge.

State TMDL ID	*Use*	*WOS Attainment*	*303(d) Impairment Initial List Year*
	Aquatic Life	**Fully Supporting**	
	Fish Consumption	**Not Assessed**	
	Recreation	**Fully Supporting**	
	Wildlife	**Fully Supporting**	

WQS Class IV Sec. 2 v NEW-5
Assessment basis: DEQ station 9-PKC011.11 (AQ, RBPII) 9-PKC011.11- Bio 'NI; no impairment. RBP II 5 year score 76.44; 2 year score 100. Both 1999 and spring 2000 surveys were poor relative to reference conditions; however, rainfall in the watershed was much lower than normal and the reference at that time (Sinking Creek, 9-SNK012.06), is a stream that does not appear to be very susceptible to drought. In 2002, the reference site for the three Peak Creek Biomonitoring stations was changed to 9-PKC011.11 since this station has been determined to be minimally impacted relative to the two downstream sites. Instream habitat scores are mostly in the optimal range. Riparian vegetation is impacted with narrow buffers immediately upstream as a result of residential land use. 9-PKC011.11- No excursions are found for DO, Temp, pH, TP or NH3-N. One FC observation exceeds the WQS 400 cfu/100 ml instantaneous criterion at 600 from 17 samples- Fully Supporting. AQ sediment exceedances of PEC SVs for lead (Pb) SV of 128 ppm, zinc (Zn) SV of 459 ppm, DDD SV of 28 ppb and DDE SV 31.3 ppb: Metals- 1999 Pb at 420 and Zn at 1520 ppm, 1998 Pb at 220 and Zn at 1080 ppm; Organics- 1999 DDD at 30 and DDE at 40 ppb- 'Observed Effect'. No VDH fish consumption advisory.

AU ID: ***VAW-N17R_PKC02A00*** **1.62** M *AU Overall Category:* **5A**

LOCATION: The segment begins downstream of the Washington Ave. Bridge (~0.20 miles) and extends on downstream to just below the Rt. 99 Bridge/Norfolk Southern Railway crossing of Peak Creek.

State TMDL ID	*Use*	*WOS Attainment*	*303(d) Impairment Initial List Year*
VAW-N17R-01	**Aquatic Life**	**Not Supporting**	
	303(d) Parameter:	**Benthic-Macroinvertebrate Bioassessments (Streams)**	**1996**
VAW-N17R-01	**Fish Consumption**	**Not Supporting**	
	303(d) Parameter:	**Polychlorinated biphenyls**	**2002**
VAW-N17R-01	**Recreation**	**Not Supporting**	
	303(d) Parameter:	**Total Fecal Coliform**	**2002**
	Wildlife	**Fully Supporting**	

WQS Class IV Sec. 2 v NEW-5
Assessment basis: DEQ stations 9-PKC009.29 (AQ, RBPII), 9-PKC007.82 ('00 FT/Sed) & 9-PKC007.80 (RBPII) 9-PKC009.29- Bio 'MI'; moderate impairment; RBP II 5 year score 48.15; 2 year score 39.92. BPJ used during many assessments due to the use of metrics not in the RBP II suite such as %Ephemeroptera (mayflies), % EPT (-Hydropsychidae), and %Chironomidae. The use of additional metrics aided in identifying declines in sensitive taxa relative to the reference station and the upper Peak Creek station (9-PKC011.11). In 2002, the reference site for the three Peak Creek Biomonitoring stations was changed to 9-PKC011.11 since that station was determined to be minimally impacted relative to the two downstream sites. Habitat in this reach has been impacted by loss of riparian vegetation and instream cover, and increased sedimentation. 9-PKC009.29- FC exceeds the WQS 400 cfu/100 ml instantaneous criterion in seven of 18 observations. Exceeding values ranged from 700 to 6300 cfu/100 ml. DO, Temp, pH, TP, water column metals and organics all are Fully Supporting. AQ sediment collections exceed the lead (Pb) PEC SV of 128 ppm and zinc (Zn) PEC SV of 459 ppm in 2000- Pb at 135 and Zn at 1280 ppm; 1999- Zn at 320 ppm; and 1998- Pb at 130 and Zn at 680 ppm- 'Observed Effect'. 9-PKC007.82- WQS 2000 Fish Tissue - PCB exceeds tissue SV of 54 ppb in Smallmouth Bass @ 71 ppb. Downstream (9-PKC004.65) Carp exceedance at 150 ppb. Assessed impaired for fish consumption based on proximity of station locations and 2 species. 9-PKC007.82- WQS 2000 Sediment exceeds PEC SVs for metals- Copper (Cu) PEC SV of 149 at 362 ppm and Zinc (Zn) SV of 459 at 1104 ppm. And organics- Phenanthrene (PEC SV 1170) at 3049 ppb, Fluoranthene (PEC SV 2230) at 5866 ppb, Pyrene (PEC SV 1520) at 3877 ppb, Benz (a) Anthrecene (PEC SV 1050) at 2047 ppb and Chrysene (PEC SV 1290) at 2133 ppb. Results in 'Observed Effect'. 9-PKC007.80- Bio 'MI'; moderate impairment; RBP II 5 year score 39.65; 2 year score 53.26. DO, Temp, pH are Fully Supporting. 9-PKC004.65 (located in VAW-N16L)- WQS 2000 fish tissue exceeds PCB SV of 54 ppb in a Carp at 150 ppb. 9-PKC004.65- WQS 2000 sediment exceeds PEC SV for copper (Cu) 149 ppm and zinc (Zn) 459 ppm from two sample collections: Cu at 326 and 327 ppm; Zn at 894 and 886 ppm- 'Observed Effect'. No VDH fish consumption advisory.

2004 Use Attainment by Assessment Units (AU)

AU ID: ***VAW-N17R_PKC01A00*** **2.84** M *AU Overall Category:* **5A**

LOCATION: This portion of Peak Creek begins just downstream of the Rt. 99/Norfolk Southern crossing extending downstream to the inundation of Peak Creek in Claytor Lake.

State TMDL ID	*Use*	*WQS Attainment*	*303(d) Impairment Initial List Year*
VAW-N17R-01	**Aquatic Life**	**Not Supporting**	
	303(d) Parameter:	**Benthic-Macroinvertebrate Bioassessments (Streams)**	**1996**
VAW-N17R-01	**Fish Consumption**	**Not Supporting**	
	303(d) Parameter:	**Polychlorinated biphenyls**	**2002**
VAW-N17R-01	**Recreation**	**Not Supporting**	
	303(d) Parameter:	**Total Fecal Coliform**	**2002**
	Wildlife	**Fully Supporting**	

WQS Class IV Sec. 2 v NEW-5
Assessment basis: DEQ stations 9-PKC009.29 (AQ), 9-PKC007.82 ('00 FT/Sed), 9-PKC007.80 (RBPII) & 9-PKC004.65 ('00 FT/Sed) 9-PKC009.29- FC exceeds the WQS 400 cfu/100 ml instantaneous criterion in seven of 18 observations. 9-PKC007.82- WQS 2000 Fish Tissue - PCB exceeds WQS TV of 54 ppb in Smallmouth Bass @ 71 ppb. Downstream (9-PKC004.65) Carp exceedance at 150 ppb. Total of 37 fish representing six species. Assessed impaired for fish consumption based on proximity of station locations and 2 species. No VDH advisory. 9-PKC007.82- WQS 2000 Sediment exceeds PEC SVs for metals- Copper (Cu) PEC SV of 149 at 362 ppm and Zinc (Zn) PEC SV of 459 at 1104 ppm. And organics- Phenanthrene (PEC SV 1170) at 3049 ppb, Fluoranthene (PEC SV 2230) at 5866 ppb, Pyrene (PEC SV 1520) at 3877 ppb, Benz (a) Anthrecene (PEC SV 1050) at 2047 ppb and Chrysene (PEC SV 1290) at 2133 ppb. Excursions result in an 'Observed Effect'. 9-PKC007.80- Bio 'MI'; moderate imapirment RBP II 5 year score 39.65; 2 year score 53.26. BPJ was used during many assessments due to the use of metrics not in the RBP II suite such as %Ephemeroptera (mayflies), % EPT (-Hydropsychidae), and %Chironomidae. The use of additional metrics aided in identifying declines in sensitive taxa relative to the reference station and the upper Peak Creek station (9-PKC011.11). In 2002, the reference site for the three Peak Creek Biomonitoring stations was changed to 9-PKC011.11 since that station was determined to be minimally impacted relative to the two downstream sites. Additionally, habitat in this reach has been impacted by the loss of riparian vegetation. DO, Temp, pH are Fully Supporting. 9-PKC004.65 (located in VAW-N16L) WQS 2000 fish tissue exceeds WQS PCB TV of 54 ppb in a Carp at 150 ppb. WQS 2000 Sediment exceeds PEC SV for copper (Cu) SV 149 ppm and zinc (Zn) SV 459 ppm from two sample collections: Cu at 326 and 327 ppm; Zn at 894 and 886 ppm- 'Observed Effect'. No VDH fish consumption advisory.

Attachment F

Wasteload and Limit Calculations

- **Effluent Data**
- **Wasteload Allocation Spreadsheet**
- **STATS Program Results (Ammonia as Nitrogen)**

Days Inn WWTP
VPDES Permit No. VA0060321

Effluent Temperature Data for 90th Percentile Calculation

Days	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07
1	15.5	20.8	22.0	23.6	23.0	16.3	10.8	11.1	6.3	4.0	3.1	13.7
2	15.8	21.4	22.2	24.0	21.8	16.6	12.8	10.0	7.6	4.1	3.9	13.8
3	15.8	21.0	22.2	24.1	21.0	16.4	11.4	9.7	7.0	3.3	6.0	14.0
4	16.0	21.2	22.7	24.3	22.0	16.7	10.9	7.0	6.8	3.4	5.8	13.9
5	16.7	21.4	24.0	24.0	21.7	17.1	9.8	8.0	6.9	3.1	5.0	13.7
6	16.5	19.2	22.8	24.7	21.5	18.0	9.8	7.3	8.3	2.9	4.8	12.5
7	16.3	18.9	22.0	24.6	21.0	17.4	9.5	7.0	9.0	2.9	4.7	12.0
8	16.0	18.9	21.6	24.8	20.7	17.0	9.7	6.6	8.4	2.4	5.3	10.9
9	15.2	20.0	21.3	24.6	20.7	16.8	9.6	5.0	8.1	2.3	5.7	9.7
10	15.3	19.2	21.6	24.7	20.4	16.1	10.0	4.8	7.7	2.3	5.9	9.4
11	15.6	19.4	21.8	24.4	20.6	16.8	12.0	4.8	5.7	2.4	6.0	9.6
12	15.2	19.8	22.3	24.0	20.6	16.5	12.1	4.6	6.0	2.4	5.9	9.9
13	15.5	20.1	22.6	23.7	19.9	15.9	11.0	4.9	6.4	2.1	7.3	9.6
14	16.1	20.1	22.5	23.4	19.7	14.4	11.1	5.5	6.7	1.7	7.6	9.8
15	15.6	19.5	22.8	23.8	19.3	13.8	11.0	5.8	6.9	1.3	7.4	10.9
16	15.1	19.4	2.8	23.4	18.9	13.5	11.4	5.6	8.7	1.2	7.3	9.7
17	15.0	19.8	23.1	23.1	19.1	12.8	11.3	5.7	7.7	2.3	8.3	9.7
18	14.9	20.0	23.6	23.1	19.2	13.0	11.0	5.8	6.8	1.9	7.4	9.8
19	14.7	19.9	23.7	23.6	19.3	14.4	10.7	7.1	6.4	1.9	7.0	10.7
20	14.9	21.3	23.9	23.6	19.0	15.1	10.4	6.9	5.6	2.1	7.0	11.4
21	15.0	21.0	23.8	23.5	16.0	14.1	8.7	6.4	5.1	2.3	6.9	11.6
22	14.9	21.2	24.2	23.6	18.8	13.8	8.5	6.3	4.4	2.6	8.9	12.1
23	16.3	21.4	24.0	23.6	18.9	13.4	8.5	7.7	4.1	2.9	9.2	12.4
24	16.2	22.1	23.4	23.0	18.9	13.6	8.3	7.7	4.1	3.0	9.7	13.9
25	15.8	22.4	23.2	23.5	18.7	11.7	8.8	7.4	4.4	2.8	10.1	14.0
26	16.0	23.0	23.5	23.3	17.9	11.8	8.8	7.2	4.2	2.8	10.4	14.2
27	18.2	22.8	23.4	23.4	17.3	11.7	8.8	7.1	4.4	3.7	12.8	14.7
28	18.8	23.0	23.8	23.5	17.4	11.4	8.6	6.2	4.4	4.0	13.6	15.6
29	19.5	22.0	23.6	23.4	16.4	11.0	8.8	6.1	4.0		13.0	15.6
30	19.9	21.7	23.8	24.1	16.1	11.1	8.8	6.2	3.6		12.8	15.4
31	19.9		24.1	23.8		10.8	9.8	6.1	3.8		13.1	

Data are given in Standard Units.

90th percentile 23 °C

90th percentile 16 °C (wet season - Jan - May)

Days Inn WWTP
VPDES Permit No. VA0060321

Effluent pH Data

Days	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07
1	7.5	7.0	7.0	7.5	7.0	7.0	7.0	7.0	7.0	7.5	7.5	7.5
2	7.0	7.0	7.0	7.5	7.0	7.0	7.5	6.5	7.0	7.0	7.0	7.5
3	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.5	7.5	7.0
4	7.0	7.0	7.5	7.5	7.0	7.0	6.5	6.5	7.0	7.5	7.0	7.0
5	7.0	7.0	7.0	7.5	7.0	7.0	6.5	7.0	7.0	7.5	7.5	7.5
6	7.0	7.0	7.0	7.5	7.0	7.0	7.0	6.5	6.5	7.5	7.5	7.5
7	7.0	7.0	7.0	7.5	7.5	7.0	6.5	7.0	7.0	7.5	7.5	7.5
8	7.0	7.0	7.0	7.0	7.0	7.0	6.5	7.0	7.5	7.0	7.5	7.5
9	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.5	7.5	7.5
10	7.0	7.0	7.0	7.5	7.0	6.5	7.0	7.0	7.0	7.5	7.0	7.5
11	7.0	7.5	7.0	7.5	7.0	7.0	7.0	7.0	7.5	7.5	7.0	7.5
12	7.0	7.0	7.0	7.0	7.5	7.0	7.0	7.0	7.5	7.5	7.0	7.5
13	7.0	7.0	7.5	7.0	7.0	7.0	7.0	6.5	7.0	6.5	7.5	7.5
14	7.0	7.0	7.0	7.5	7.0	7.5	7.0	6.5	7.0	7.5	7.5	7.5
15	7.5	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.5	7.0	7.5
16	7.0	7.0	7.0	7.0	7.0	6.5	6.5	7.0	7.5	7.5	7.0	7.5
17	7.0	7.0	7.0	7.0	7.0	6.5	7.5	7.0	7.5	7.0	7.5	7.5
18	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.5	7.5	7.5	7.5
19	7.0	7.0	7.5	7.0	7.0	7.0	6.5	7.5	7.0	7.5	7.5	7.5
20	7.0	7.5	7.0	7.0	7.0	7.0	7.0	7.5	7.5	7.5	7.5	7.5
21	7.0	7.0	7.0	7.0	7.0	6.5	7.5	7.0	7.5	7.5	7.0	7.0
22	7.0	7.0	7.0	7.0	7.0	7.0	6.5	7.0	7.5	7.0	7.5	7.0
23	7.5	7.0	7.5	7.0	7.0	6.5	7.0	7.0	7.5	7.0	7.5	7.5
24	7.0	7.5	7.5	7.5	7.0	7.5	7.0	7.5	7.0	7.0	7.0	7.5
25	7.0	7.0	7.0	7.0	7.0	6.5	7.0	7.5	7.5	7.5	7.0	7.5
26	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.5	7.0	7.0
27	7.5	7.0	7.5	7.5	7.0	7.0	6.5	7.0	7.0	7.5	7.5	7.0
28	7.0	7.0	7.5	7.0	7.0	7.0	6.5	7.5	7.0	7.0	7.0	7.5
29	7.0	7.0	7.5	7.5	7.0	7.0	6.5	7.0	7.5		7.5	7.5
30	7.0	7.0	7.0	7.5	7.0	7.0	7.0	7.0	7.5		7.5	7.5
31	7.0		7.5	7.0		7.0		7.0	7.5		7.5	

90th percentile	7.5 S.U.
10th percentile	7.0 S.U.

Days Inn WWTP
VPDES Permit No. VA0060321

Effluent Total Phosphorus Monitoring Data (grab samples)

Date	Phosphorus (mg/l)
6/2/98	0.9
7/98	6.1
8/3/98	4.8
9/3/98	4.2
10/1/98	5
11/2/98	3.3
12/98	4.1
1/4/99	3.9
2/1/99	5.2
3/1/99	2.7
5/4/99	4.4
6/1/99	5.4
7/2/99	5.1
8/2/99	13.6
9/3/99	4.2
10/1/99	4.5
11/3/99	3.9
12/1/99	4.17
6/1/01	2.3
7/3/01	3.1
8/1/01	3.0
9/4/01	4.4

Days Inn WWTP
VA0060321

E. coli Data

8/24/2005	1
8/29/2005	2
9/1/2005	1
9/6/2005	1
9/12/2005	1
9/15/2005	1
9/20/2005	2
9/21/2005	2
9/26/2005	1
9/29/2005	1
10/4/2005	1
10/5/2005	1
Geometric mean	1 #/100 mL

FRESHWATER
WATER QUALITY CRITERIA / WASTELOAD ALLOCATION ANALYSIS

Facility Name: Days Inn WWTP Permit No.: VA0060321

Receiving Stream: Peak Creek, UT Version: OWP Guidance Memo 00-2011 (8/24/00)

Stream Information

Mean Hardness (as CaCO3) =	117 mg/L
90% Temperature (Annual) =	23 deg C
90% Temperature (Wet season) =	16 deg C
90% Maximum pH =	7.5 SU
10% Maximum pH =	7 SU
Tier Designation (1 or 2) =	1
Public Water Supply (PWS) Y/N? =	n
Trout Present Y/N? =	n
Early Life Stages Present Y/N? =	y

Stream Flows

1Q10 (Annual) =	0 MGD
7Q10 (Annual) =	0 MGD
30Q10 (Annual) =	0 MGD
1Q10 (Wet season) =	0 MGD
30Q10 (Wet season)	0 MGD
30Q5 =	0 MGD
Harmonic Mean =	0 MGD
Annual Average =	0 MGD

Mixing Information

Annual - 1Q10 Mix =	100 %
- 7Q10 Mix =	100 %
- 30Q10 Mix =	100 %
Wet Season - 1Q10 Mix =	100 %
- 30Q10 Mix =	100 %

Effluent Information

Mean Hardness (as CaCO3) =	117 mg/L
90% Temp (Annual) =	23 deg C
90% Temp (Wet season) =	16 deg C
90% Maximum pH =	7.5 SU
10% Maximum pH =	7 SU
Discharge Flow =	0.039 MGD

Parameter	Background	Water Quality Criteria				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				**Most Limiting Allocations**			
(ug/l unless noted)	Conc.	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	**Acute**	**Chronic**	**HH (PWS)**	**HH**
Acenapthene	0	--	--	na	2.7E+03	--	--	na	2.7E+03	--	--	--	--	--	--	--	--	--	--	na	**2.7E+03**
Acrolein	0	--	--	na	7.8E+02	--	--	na	7.8E+02	--	--	--	--	--	--	--	--	--	--	na	**7.8E+02**
Acrylonitrile[C]	0	--	--	na	6.6E+00	--	--	na	6.6E+00	--	--	--	--	--	--	--	--	--	--	na	**6.6E+00**
Aldrin [C]	0	3.0E+00	--	na	1.4E-03	3.0E+00	--	na	1.4E-03	--	--	--	--	--	--	--	--	**3.0E+00**	--	na	**1.4E-03**
Ammonia-N (mg/l) (Yearly)	0	1.99E+01	2.53E+00	na	--	2.0E+01	2.5E+00	na	--	--	--	--	--	--	--	--	--	**2.0E+01**	**2.5E+00**	na	--
Ammonia-N (mg/l) (High Flow)	0	1.99E+01	3.97E+00	na	--	2.0E+01	4.0E+00	na	--	--	--	--	--	--	--	--	--	**2.0E+01**	**4.0E+00**	na	--
Anthracene	0	--	--	na	1.1E+05	--	--	na	1.1E+05	--	--	--	--	--	--	--	--	--	--	na	**1.1E+05**
Antimony	0	--	--	na	4.3E+03	--	--	na	4.3E+03	--	--	--	--	--	--	--	--	--	--	na	**4.3E+03**
Arsenic	0	3.4E+02	1.5E+02	na	--	3.4E+02	1.5E+02	na	--	--	--	--	--	--	--	--	--	**3.4E+02**	**1.5E+02**	na	--
Barium	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Benzene [C]	0	--	--	na	7.1E+02	--	--	na	7.1E+02	--	--	--	--	--	--	--	--	--	--	na	**7.1E+02**
Benzidine[C]	0	--	--	na	5.4E-03	--	--	na	5.4E-03	--	--	--	--	--	--	--	--	--	--	na	**5.4E-03**
Benzo (a) anthracene [C]	0	--	--	na	4.9E-01	--	--	na	4.9E-01	--	--	--	--	--	--	--	--	--	--	na	**4.9E-01**
Benzo (b) fluoranthene [C]	0	--	--	na	4.9E-01	--	--	na	4.9E-01	--	--	--	--	--	--	--	--	--	--	na	**4.9E-01**
Benzo (k) fluoranthene [C]	0	--	--	na	4.9E-01	--	--	na	4.9E-01	--	--	--	--	--	--	--	--	--	--	na	**4.9E-01**
Benzo (a) pyrene [C]	0	--	--	na	4.9E-01	--	--	na	4.9E-01	--	--	--	--	--	--	--	--	--	--	na	**4.9E-01**
Bis2-Chloroethyl Ether	0	--	--	na	1.4E+01	--	--	na	1.4E+01	--	--	--	--	--	--	--	--	--	--	na	**1.4E+01**
Bis2-Chloroisopropyl Ether	0	--	--	na	1.7E+05	--	--	na	1.7E+05	--	--	--	--	--	--	--	--	--	--	na	**1.7E+05**
Bromoform [C]	0	--	--	na	3.6E+03	--	--	na	3.6E+03	--	--	--	--	--	--	--	--	--	--	na	**3.6E+03**
Butylbenzylphthalate	0	--	--	na	5.2E+03	--	--	na	5.2E+03	--	--	--	--	--	--	--	--	--	--	na	**5.2E+03**
Cadmium	0	4.7E+00	1.3E+00	na	--	4.7E+00	1.3E+00	na	--	--	--	--	--	--	--	--	--	**4.7E+00**	**1.3E+00**	na	--
Carbon Tetrachloride [C]	0	--	--	na	4.4E+01	--	--	na	4.4E+01	--	--	--	--	--	--	--	--	--	--	na	**4.4E+01**
Chlordane [C]	0	2.4E+00	4.3E-03	na	2.2E-02	2.4E+00	4.3E-03	na	2.2E-02	--	--	--	--	--	--	--	--	**2.4E+00**	**4.3E-03**	na	**2.2E-02**
Chloride	0	8.6E+05	2.3E+05	na	--	8.6E+05	2.3E+05	na	--	--	--	--	--	--	--	--	--	**8.6E+05**	**2.3E+05**	na	--
TRC	0	1.9E+01	1.1E+01	na	--	1.9E+01	1.1E+01	na	--	--	--	--	--	--	--	--	--	**1.9E+01**	**1.1E+01**	na	--
Chlorobenzene	0	--	--	na	2.1E+04	--	--	na	2.1E+04	--	--	--	--	--	--	--	--	--	--	na	**2.1E+04**

Parameter	Background	Water Quality Criteria				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				Most Limiting Allocations			
(ug/l unless noted)	Conc.	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH
Chlorodibromomethane[C]	0	--	--	na	3.4E+02	--	--	na	3.4E+02	--	--	--	--	--	--	--	--	--	--	na	3.4E+02
Chloroform [C]	0	--	--	na	2.9E+04	--	--	na	2.9E+04	--	--	--	--	--	--	--	--	--	--	na	2.9E+04
2-Chloronaphthalene	0	--	--	na	4.3E+03	--	--	na	4.3E+03	--	--	--	--	--	--	--	--	--	--	na	4.3E+03
2-Chlorophenol	0	--	--	na	4.0E+02	--	--	na	4.0E+02	--	--	--	--	--	--	--	--	--	--	na	4.0E+02
Chlorpyrifos	0	8.3E-02	4.1E-02	na	--	8.3E-02	4.1E-02	na	--	--	--	--	--	--	--	--	--	8.3E-02	4.1E-02	na	--
Chromium III	0	6.5E+02	8.4E+01	na	--	6.5E+02	8.4E+01	na	--	--	--	--	--	--	--	--	--	6.5E+02	8.4E+01	na	--
Chromium VI	0	1.6E+01	1.1E+01	na	--	1.6E+01	1.1E+01	na	--	--	--	--	--	--	--	--	--	1.6E+01	1.1E+01	na	--
Chromium, Total	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Chrysene [C]	0	--	--	na	4.9E-01	--	--	na	4.9E-01	--	--	--	--	--	--	--	--	--	--	na	4.9E-01
Copper	0	1.6E+01	1.0E+01	na	--	1.6E+01	1.0E+01	na	--	--	--	--	--	--	--	--	--	1.6E+01	1.0E+01	na	--
Cyanide	0	2.2E+01	5.2E+00	na	2.2E+05	2.2E+01	5.2E+00	na	2.2E+05	--	--	--	--	--	--	--	--	2.2E+01	5.2E+00	na	2.2E+05
DDD [C]	0	--	--	na	8.4E-03	--	--	na	8.4E-03	--	--	--	--	--	--	--	--	--	--	na	8.4E-03
DDE [C]	0	--	--	na	5.9E-03	--	--	na	5.9E-03	--	--	--	--	--	--	--	--	--	--	na	5.9E-03
DDT [C]	0	1.1E+00	1.0E-03	na	5.9E-03	1.1E+00	1.0E-03	na	5.9E-03	--	--	--	--	--	--	--	--	1.1E+00	1.0E-03	na	5.9E-03
Demeton	0	--	1.0E-01	na	--	--	1.0E-01	na	--	--	--	--	--	--	--	--	--	--	1.0E-01	na	--
Dibenz(a,h)anthracene [C]	0	--	--	na	4.9E-01	--	--	na	4.9E-01	--	--	--	--	--	--	--	--	--	--	na	4.9E-01
Dibutyl phthalate	0	--	--	na	1.2E+04	--	--	na	1.2E+04	--	--	--	--	--	--	--	--	--	--	na	1.2E+04
Dichloromethane (Methylene Chloride) [C]	0	--	--	na	1.6E+04	--	--	na	1.6E+04	--	--	--	--	--	--	--	--	--	--	na	1.6E+04
1,2-Dichlorobenzene	0	--	--	na	1.7E+04	--	--	na	1.7E+04	--	--	--	--	--	--	--	--	--	--	na	1.7E+04
1,3-Dichlorobenzene	0	--	--	na	2.6E+03	--	--	na	2.6E+03	--	--	--	--	--	--	--	--	--	--	na	2.6E+03
1,4-Dichlorobenzene	0	--	--	na	2.6E+03	--	--	na	2.6E+03	--	--	--	--	--	--	--	--	--	--	na	2.6E+03
3,3-Dichlorobenzidine[C]	0	--	--	na	7.7E-01	--	--	na	7.7E-01	--	--	--	--	--	--	--	--	--	--	na	7.7E-01
Dichlorobromomethane [C]	0	--	--	na	4.6E+02	--	--	na	4.6E+02	--	--	--	--	--	--	--	--	--	--	na	4.6E+02
1,2-Dichloroethane [C]	0	--	--	na	9.9E+02	--	--	na	9.9E+02	--	--	--	--	--	--	--	--	--	--	na	9.9E+02
1,1-Dichloroethylene	0	--	--	na	1.7E+04	--	--	na	1.7E+04	--	--	--	--	--	--	--	--	--	--	na	1.7E+04
1,2-trans-dichloroethylene	0	--	--	na	1.4E+05	--	--	na	1.4E+05	--	--	--	--	--	--	--	--	--	--	na	1.4E+05
2,4-Dichlorophenol	0	--	--	na	7.9E+02	--	--	na	7.9E+02	--	--	--	--	--	--	--	--	--	--	na	7.9E+02
2,4-Dichlorophenoxy acetic acid (2,4-D)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
1,2-Dichloropropane[C]	0	--	--	na	3.9E+02	--	--	na	3.9E+02	--	--	--	--	--	--	--	--	--	--	na	3.9E+02
1,3-Dichloropropene	0	--	--	na	1.7E+03	--	--	na	1.7E+03	--	--	--	--	--	--	--	--	--	--	na	1.7E+03
Dieldrin [C]	0	2.4E-01	5.6E-02	na	1.4E-03	2.4E-01	5.6E-02	na	1.4E-03	--	--	--	--	--	--	--	--	2.4E-01	5.6E-02	na	1.4E-03
Diethyl Phthalate	0	--	--	na	1.2E+05	--	--	na	1.2E+05	--	--	--	--	--	--	--	--	--	--	na	1.2E+05
Di-2-Ethylhexyl Phthalate [C]	0	--	--	na	5.9E+01	--	--	na	5.9E+01	--	--	--	--	--	--	--	--	--	--	na	5.9E+01
2,4-Dimethylphenol	0	--	--	na	2.3E+03	--	--	na	2.3E+03	--	--	--	--	--	--	--	--	--	--	na	2.3E+03
Dimethyl Phthalate	0	--	--	na	2.9E+06	--	--	na	2.9E+06	--	--	--	--	--	--	--	--	--	--	na	2.9E+06
Di-n-Butyl Phthalate	0	--	--	na	1.2E+04	--	--	na	1.2E+04	--	--	--	--	--	--	--	--	--	--	na	1.2E+04
2,4 Dinitrophenol	0	--	--	na	1.4E+04	--	--	na	1.4E+04	--	--	--	--	--	--	--	--	--	--	na	1.4E+04
2-Methyl-4,6-Dinitrophenol	0	--	--	na	7.65E+02	--	--	na	7.7E+02	--	--	--	--	--	--	--	--	--	--	na	7.7E+02
2,4-Dinitrotoluene [C]	0	--	--	na	9.1E+01	--	--	na	9.1E+01	--	--	--	--	--	--	--	--	--	--	na	9.1E+01
Dioxin (2,3,7,8-tetrachlorodibenzo-p-dioxin) (ppq)	0	--	--	na	1.2E-06	--	--	na	na	--	--	--	--	--	--	--	--	--	--	na	na
1,2-Diphenylhydrazine[C]	0	--	--	na	5.4E+00	--	--	na	5.4E+00	--	--	--	--	--	--	--	--	--	--	na	5.4E+00
Alpha-Endosulfan	0	2.2E-01	5.6E-02	na	2.4E+02	2.2E-01	5.6E-02	na	2.4E+02	--	--	--	--	--	--	--	--	2.2E-01	5.6E-02	na	2.4E+02
Beta-Endosulfan	0	2.2E-01	5.6E-02	na	2.4E+02	2.2E-01	5.6E-02	na	2.4E+02	--	--	--	--	--	--	--	--	2.2E-01	5.6E-02	na	2.4E+02
Endosulfan Sulfate	0	--	--	na	2.4E+02	--	--	na	2.4E+02	--	--	--	--	--	--	--	--	--	--	na	2.4E+02
Endrin	0	8.6E-02	3.6E-02	na	8.1E-01	8.6E-02	3.6E-02	na	8.1E-01	--	--	--	--	--	--	--	--	8.6E-02	3.6E-02	na	8.1E-01
Endrin Aldehyde	0	--	--	na	8.1E-01	--	--	na	8.1E-01	--	--	--	--	--	--	--	--	--	--	na	8.1E-01

Parameter	Background	Water Quality Criteria				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				Most Limiting Allocations			
(ug/l unless noted)	Conc.	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH
Ethylbenzene	0	--	--	na	2.9E+04	--	--	na	2.9E+04	--	--	--	--	--	--	--	--	--	--	na	2.9E+04
Fluoranthene	0	--	--	na	3.7E+02	--	--	na	3.7E+02	--	--	--	--	--	--	--	--	--	--	na	3.7E+02
Fluorene	0	--	--	na	1.4E+04	--	--	na	1.4E+04	--	--	--	--	--	--	--	--	--	--	na	1.4E+04
Foaming Agents	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Guthion	0	--	1.0E-02	na	--	--	1.0E-02	na	--	--	--	--	--	--	--	--	--	--	1.0E-02	na	--
Heptachlor [c]	0	5.2E-01	3.8E-03	na	2.1E-03	5.2E-01	3.8E-03	na	2.1E-03	--	--	--	--	--	--	--	--	5.2E-01	3.8E-03	na	2.1E-03
Heptachlor Epoxide[c]	0	5.2E-01	3.8E-03	na	1.1E-03	5.2E-01	3.8E-03	na	1.1E-03	--	--	--	--	--	--	--	--	5.2E-01	3.8E-03	na	1.1E-03
Hexachlorobenzene[c]	0	--	--	na	7.7E-03	--	--	na	7.7E-03	--	--	--	--	--	--	--	--	--	--	na	7.7E-03
Hexachlorobutadiene[c]	0	--	--	na	5.0E+02	--	--	na	5.0E+02	--	--	--	--	--	--	--	--	--	--	na	5.0E+02
Hexachlorocyclohexane Alpha-BHC[c]	0	--	--	na	1.3E-01	--	--	na	1.3E-01	--	--	--	--	--	--	--	--	--	--	na	1.3E-01
Hexachlorocyclohexane Beta-BHC[c]	0	--	--	na	4.6E-01	--	--	na	4.6E-01	--	--	--	--	--	--	--	--	--	--	na	4.6E-01
Hexachlorocyclohexane Gamma-BHC[c] (Lindane)	0	9.5E-01	na	na	6.3E-01	9.5E-01	--	na	6.3E-01	--	--	--	--	--	--	--	--	9.5E-01	--	na	6.3E-01
Hexachlorocyclopentadiene	0	--	--	na	1.7E+04	--	--	na	1.7E+04	--	--	--	--	--	--	--	--	--	--	na	1.7E+04
Hexachloroethane[c]	0	--	--	na	8.9E+01	--	--	na	8.9E+01	--	--	--	--	--	--	--	--	--	--	na	8.9E+01
Hydrogen Sulfide	0	--	2.0E+00	na	--	--	2.0E+00	na	--	--	--	--	--	--	--	--	--	--	2.0E+00	na	--
Indeno (1,2,3-cd) pyrene [c]	0	--	--	na	4.9E-01	--	--	na	4.9E-01	--	--	--	--	--	--	--	--	--	--	na	4.9E-01
Iron	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Isophorone[c]	0	--	--	na	2.6E+04	--	--	na	2.6E+04	--	--	--	--	--	--	--	--	--	--	na	2.6E+04
Kepone	0	--	0.0E+00	na	--	--	0.0E+00	na	--	--	--	--	--	--	--	--	--	--	0.0E+00	na	--
Lead	0	1.5E+02	1.6E+01	na	--	1.5E+02	1.6E+01	na	--	--	--	--	--	--	--	--	--	1.5E+02	1.6E+01	na	--
Malathion	0	--	1.0E-01	na	--	--	1.0E-01	na	--	--	--	--	--	--	--	--	--	--	1.0E-01	na	--
Manganese	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Mercury	0	1.4E+00	7.7E-01	na	5.1E-02	1.4E+00	7.7E-01	na	5.1E-02	--	--	--	--	--	--	--	--	1.4E+00	7.7E-01	na	5.1E-02
Methyl Bromide	0	--	--	na	4.0E+03	--	--	na	4.0E+03	--	--	--	--	--	--	--	--	--	--	na	4.0E+03
Methoxychlor	0	--	3.0E-02	na	--	--	3.0E-02	na	--	--	--	--	--	--	--	--	--	--	3.0E-02	na	--
Mirex	0	--	0.0E+00	na	--	--	0.0E+00	na	--	--	--	--	--	--	--	--	--	--	0.0E+00	na	--
Monochlorobenzene	0	--	--	na	2.1E+04	--	--	na	2.1E+04	--	--	--	--	--	--	--	--	--	--	na	2.1E+04
Nickel	0	2.1E+02	2.3E+01	na	4.6E+03	2.1E+02	2.3E+01	na	4.6E+03	--	--	--	--	--	--	--	--	2.1E+02	2.3E+01	na	4.6E+03
Nitrate (as N)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Nitrobenzene	0	--	--	na	1.9E+03	--	--	na	1.9E+03	--	--	--	--	--	--	--	--	--	--	na	1.9E+03
N-Nitrosodimethylamine[c]	0	--	--	na	8.1E+01	--	--	na	8.1E+01	--	--	--	--	--	--	--	--	--	--	na	8.1E+01
N-Nitrosodiphenylamine[c]	0	--	--	na	1.6E+02	--	--	na	1.6E+02	--	--	--	--	--	--	--	--	--	--	na	1.6E+02
N-Nitrosodi-n-propylamine[c]	0	--	--	na	1.4E+01	--	--	na	1.4E+01	--	--	--	--	--	--	--	--	--	--	na	1.4E+01
Parathion	0	6.5E-02	1.3E-02	na	--	6.5E-02	1.3E-02	na	--	--	--	--	--	--	--	--	--	6.5E-02	1.3E-02	na	--
PCB-1016	0	--	1.4E-02	na	--	--	1.4E-02	na	--	--	--	--	--	--	--	--	--	--	1.4E-02	na	--
PCB-1221	0	--	1.4E-02	na	--	--	1.4E-02	na	--	--	--	--	--	--	--	--	--	--	1.4E-02	na	--
PCB-1232	0	--	1.4E-02	na	--	--	1.4E-02	na	--	--	--	--	--	--	--	--	--	--	1.4E-02	na	--
PCB-1242	0	--	1.4E-02	na	--	--	1.4E-02	na	--	--	--	--	--	--	--	--	--	--	1.4E-02	na	--
PCB-1248	0	--	1.4E-02	na	--	--	1.4E-02	na	--	--	--	--	--	--	--	--	--	--	1.4E-02	na	--
PCB-1254	0	--	1.4E-02	na	--	--	1.4E-02	na	--	--	--	--	--	--	--	--	--	--	1.4E-02	na	--
PCB-1260	0	--	1.4E-02	na	--	--	1.4E-02	na	--	--	--	--	--	--	--	--	--	--	1.4E-02	na	--
PCB Total[c]	0	--	--	na	1.7E-03	--	--	na	1.7E-03	--	--	--	--	--	--	--	--	--	--	na	1.7E-03

Parameter	Background	Water Quality Criteria				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				Most Limiting Allocations			
(ug/l unless noted)	Conc.	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH
Pentachlorophenol [C]	0	8.7E+00	6.7E+00	na	8.2E+01	8.7E+00	6.7E+00	na	8.2E+01	--	--	--	--	--	--	--	--	**8.7E+00**	**6.7E+00**	**na**	**8.2E+01**
Phenol	0	--	--	na	4.6E+06	--	--	na	4.6E+06	--	--	--	--	--	--	--	--	--	--	**na**	**4.6E+06**
Pyrene	0	--	--	na	1.1E+04	--	--	na	1.1E+04	--	--	--	--	--	--	--	--	--	--	**na**	**1.1E+04**
Radionuclides (pCi/l except Beta/Photon)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	**na**	--
Gross Alpha Activity	0	--	--	na	1.5E+01	--	--	na	1.5E+01	--	--	--	--	--	--	--	--	--	--	**na**	**1.5E+01**
Beta and Photon Activity (mrem/yr)	0	--	--	na	4.0E+00	--	--	na	4.0E+00	--	--	--	--	--	--	--	--	--	--	**na**	**4.0E+00**
Strontium-90	0	--	--	na	8.0E+00	--	--	na	8.0E+00	--	--	--	--	--	--	--	--	--	--	**na**	**8.0E+00**
Tritium	0	--	--	na	2.0E+04	--	--	na	2.0E+04	--	--	--	--	--	--	--	--	--	--	**na**	**2.0E+04**
Selenium	0	2.0E+01	5.0E+00	na	1.1E+04	2.0E+01	5.0E+00	na	1.1E+04	--	--	--	--	--	--	--	--	**2.0E+01**	**5.0E+00**	**na**	**1.1E+04**
Silver	0	4.5E+00	--	na	--	4.5E+00	--	na	--	--	--	--	--	--	--	--	--	**4.5E+00**	--	**na**	--
Sulfate	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	**na**	--
1,1,2,2-Tetrachloroethane[C]	0	--	--	na	1.1E+02	--	--	na	1.1E+02	--	--	--	--	--	--	--	--	--	--	**na**	**1.1E+02**
Tetrachloroethylene[C]	0	--	--	na	8.9E+01	--	--	na	8.9E+01	--	--	--	--	--	--	--	--	--	--	**na**	**8.9E+01**
Thallium	0	--	--	na	6.3E+00	--	--	na	6.3E+00	--	--	--	--	--	--	--	--	--	--	**na**	**6.3E+00**
Toluene	0	--	--	na	2.0E+05	--	--	na	2.0E+05	--	--	--	--	--	--	--	--	--	--	**na**	**2.0E+05**
Total dissolved solids	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	**na**	--
Toxaphene [C]	0	7.3E-01	2.0E-04	na	7.5E-03	7.3E-01	2.0E-04	na	7.5E-03	--	--	--	--	--	--	--	--	**7.3E-01**	**2.0E-04**	**na**	**7.5E-03**
Tributyltin	0	4.6E-01	6.3E-02	na	--	4.6E-01	6.3E-02	na	--	--	--	--	--	--	--	--	--	**4.6E-01**	**6.3E-02**	**na**	--
1,2,4-Trichlorobenzene	0	--	--	na	9.4E+02	--	--	na	9.4E+02	--	--	--	--	--	--	--	--	--	--	**na**	**9.4E+02**
1,1,2-Trichloroethane[C]	0	--	--	na	4.2E+02	--	--	na	4.2E+02	--	--	--	--	--	--	--	--	--	--	**na**	**4.2E+02**
Trichloroethylene [C]	0	--	--	na	8.1E+02	--	--	na	8.1E+02	--	--	--	--	--	--	--	--	--	--	**na**	**8.1E+02**
2,4,6-Trichlorophenol [C]	0	--	--	na	6.5E+01	--	--	na	6.5E+01	--	--	--	--	--	--	--	--	--	--	**na**	**6.5E+01**
2-(2,4,5-Trichlorophenoxy) propionic acid (Silvex)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	**na**	--
Vinyl Chloride[C]	0	--	--	na	6.1E+01	--	--	na	6.1E+01	--	--	--	--	--	--	--	--	--	--	**na**	**6.1E+01**
Zinc	0	1.3E+02	1.3E+02	na	6.9E+04	1.3E+02	1.3E+02	na	6.9E+04	--	--	--	--	--	--	--	--	**1.3E+02**	**1.3E+02**	**na**	**6.9E+04**

Notes:

1. All concentrations expressed as micrograms/liter (ug/l), unless noted otherwise
2. Discharge flow is highest monthly average or Form 2C maximum for Industries and design flow for Municipals
3. Metals measured as Dissolved, unless specified otherwise
4. "C" indicates a carcinogenic parameter
5. Regular WLAs are mass balances (minus background concentration) using the % of stream flow entered above under Mixing Information.
   Antidegradation WLAs are based upon a complete mix.
6. Antideg. Baseline = (0.25(WQC - background conc.) + background conc.) for acute and chronic
   = (0.1(WQC - background conc.) + background conc.) for human health
7. WLAs established at the following stream flows: 1Q10 for Acute, 30Q10 for Chronic Ammonia, 7Q10 for Other Chronic, 30Q5 for Non-carcinogens, Harmonic Mean for Carcinogens, and Annual Average for Dioxin. Mixing ratios may be substituted for stream flows where appropriate.

Metal	Target Value (SSTV)
Antimony	4.3E+03
Arsenic	9.0E+01
Barium	na
Cadmium	7.7E-01
Chromium III	5.1E+01
Chromium VI	6.4E+00
Copper	6.1E+00
Iron	na
Lead	9.9E+00
Manganese	na
Mercury	5.1E-02
Nickel	1.4E+01
Selenium	3.0E+00
Silver	1.8E+00
Zinc	5.4E+01

Note: do not use QL's lower than the minimum QL's provided in agency guidance

0.039 MGD DISCHARGE FLOW - STREAM MIX PER "Mix.exe"

Discharge Flow Used for WQS-WLA Calculations (MGI 0.039

	Stream Flows Allocated to Mix (MGD)		Total Mix Flows Stream + Discharge (MGD)	
	Dry Season	Wet Season	Dry Season	Wet Season
1Q10	0.000	0.000	0.039	0.039
7Q10	0.000	N/A	0.039	N/A
30Q10	0.000	0.000	0.039	0.039
30Q5	0.000	N/A	0.039	N/A
Harm. Mean	0.000	N/A	0.039	N/A
Annual Avg.	0.000	N/A	0.039	N/A

Stream/Discharge Mix Values

	Dry Season	Wet Season
1Q10 90th% Temp. Mix (deg C)	23.000	16.000
30Q10 90th% Temp. Mix (deg C)	23.000	16.000
1Q10 90th% pH Mix (SU)	7.500	7.500
30Q10 90th% pH Mix (SU)	7.500	7.500
1Q10 10th% pH Mix (SU)	7.000	N/A
7Q10 10th% pH Mix (SU)	7.000	N/A
	Calculated	Formula Inputs
1Q10 Hardness (mg/L as CaCO3)	117.0	117.0
7Q10 Hardness (mg/L as CaCO3)	117.0	117.0

Ammonia - Dry Season - Acute

90th Percentile pH (SU)	7.500
(7.204 - pH)	-0.296
(pH - 7.204)	0.296
Trout Present Criterion (mg N/l	13.283
Trout Absent Criterion (mg N/L	19.890
Trout Present?	n
Effective Criterion (mg N/L)	19.890

Ammonia - Dry Season - Chronic

90th Percentile Temp. (deg C)	23.000
90th Percentile pH (SU)	7.500
MIN	1.650
MAX	23.000
(7.688 - pH)	0.188
(pH - 7.688)	-0.188
Early LS Present Criterion (mg N	2.526
Early LS Absent Criterion (mg N/	2.526
Early Life Stages Present?	y
Effective Criterion (mg N/L)	2.526

Ammonia - Wet Season - Acute

90th Percentile pH (SU)	7.500
(7.204 - pH)	-0.296
(pH - 7.204)	0.296
Trout Present Criterion (mg N/l	13.283
Trout Absent Criterion (mg N/L	19.890
Trout Present?	n
Effective Criterion (mg N/L)	19.890

Ammonia - Wet Season - Chronic

90th Percentile Temp. (deg C)	16.000
90th Percentile pH (SU)	7.500
MIN	2.590
MAX	16.000
(7.688 - pH)	0.188
(pH - 7.688)	-0.188
Early LS Present Criterion (mg N	3.966
Early LS Absent Criterion (mg N/	3.966
Early Life Stages Present?	y
Effective Criterion (mg N/L)	3.966

0.039 MGD DISCHARGE FLOW - COMPLETE STREAM MIX

Discharge Flow Used for WQS-WLA Calculations (MGI 0.039

	100% Stream Flows Allocated to Mix (MGD)		Total Mix Flows Stream + Discharge (MGD)	
	Dry Season	Wet Season	Dry Season	Wet Season
1Q10	0.000	0.000	0.039	0.039
7Q10	0.000	N/A	0.039	N/A
30Q10	0.000	0.000	0.039	0.039
30Q5	0.000	N/A	0.039	N/A
Harm. Mean	0.000	N/A	0.039	N/A
Annual Avg.	0.000	N/A	0.039	N/A

Stream/Discharge Mix Values

	Dry Season	Wet Season
1Q10 90th% Temp. Mix (deg C)	23.000	16.000
30Q10 90th% Temp. Mix (deg C)	23.000	16.000
1Q10 90th% pH Mix (SU)	7.500	7.500
30Q10 90th% pH Mix (SU)	7.500	7.500
1Q10 10th% pH Mix (SU)	7.000	N/A
7Q10 10th% pH Mix (SU)	7.000	N/A
	Calculated	Formula Inputs
1Q10 Hardness (mg/L as CaCO3) =	117.000	117.000
7Q10 Hardness (mg/L as CaCO3) =	117.000	117.000

Ammonia - Dry Season - Acute

90th Percentile pH (SU)	7.500
(7.204 - pH)	-0.296
(pH - 7.204)	0.296
Trout Present Criterion (mg N/l	13.283
Trout Absent Criterion (mg N/L	19.890
Trout Present?	n
Effective Criterion (mg N/L)	19.890

Ammonia - Dry Season - Chronic

90th Percentile Temp. (deg C)	23.000
90th Percentile pH (SU)	7.500
MIN	1.650
MAX	23.000
(7.688 - pH)	0.188
(pH - 7.688)	-0.188
Early LS Present Criterion (mg N	2.526
Early LS Absent Criterion (mg N/	2.526
Early Life Stages Present?	y
Effective Criterion (mg N/L)	2.526

Ammonia - Wet Season - Acute

90th Percentile pH (SU)	7.500
(7.204 - pH)	-0.296
(pH - 7.204)	0.296
Trout Present Criterion (mg N/l	13.283
Trout Absent Criterion (mg N/L	19.890
Trout Present?	n
Effective Criterion (mg N/L)	19.890

Ammonia - Wet Season - Chronic

90th Percentile Temp. (deg C)	16.000
90th Percentile pH (SU)	7.500
MIN	2.590
MAX	16.000
(7.688 - pH)	0.188
(pH - 7.688)	-0.188
Early LS Present Criterion (mg N	3.966
Early LS Absent Criterion (mg N/	3.966
Early Life Stages Present?	y
Effective Criterion (mg N/L)	3.966

12/7/2007 10:47:29 AM

Facility = Days Inn WWTP
Chemical = ammonia as N (mg/L)
Chronic averaging period = 30
WLAa = 20
WLAc = 2.5
Q.L. = 0.2
# samples/mo. = 1
# samples/wk. = 1

Summary of Statistics:

observations = 1
Expected Value = 9
Variance = 29.16
C.V. = 0.6
97th percentile daily values = 21.9007
97th percentile 4 day average = 14.9741
97th percentile 30 day average= 10.8544
< Q.L. = 0
Model used = BPJ Assumptions, type 2 data

A limit is needed based on Chronic Toxicity
Maximum Daily Limit = 5.04417523354078
Average Weekly limit = 5.04417523354078
Average Monthly LImit = 5.04417523354078

The data are:

9

Attachment G

Dissolved Oxygen Model Calculations

~~Red Carpet~~ Days Inn Streeter Phillips DO Model

DO (Limit)	Cs (DO)	Q (cfs)	k2	K1 @20 C
6.00	8.00	0.039	0.3	0.138
L (BOD5)	**T C**	**V (ft/s)**		
38	27.00	0.5		

Distance from Discharge (Miles)	Time from Discharge (Days) t	DO Deficient D1	DO (mg/l)
0	0	2	6.00000
0.1	0.0122222	2.12985914	5.87014
0.2	0.0244444	2.25805798	5.74194
0.3	0.0366667	2.3846127	5.61539
0.4	0.0488889	2.5095393	5.49046
0.5	0.0611111	2.63285367	5.36715
0.6	0.0733333	2.75457153	5.24543
0.7	0.0855555	2.87470848	5.12529
0.8	0.0977778	2.99327997	5.00672
0.9	0.11	3.11030132	4.88970
1	0.1222222	3.22578769	4.77421
1.05	0.1283333	3.28295998	4.71704
1.05	**0.13**	**3.30**	**4.70151**

Bolded numbers represent output from hand calculations on previous page.

Effluent DO of 6.0 mg/l results in violation of water quality stream standard 5.0 mg/l.

5/2/95

Red Carpet Inn (currently named Days Inn)

discharge to unnamed tributary to Peak Creek.

unnamed tributary is reasonable distance from discharge point to Peak Creek in approx 1.05 miles or 5550 ft.

effluent must be self sustaining to Peak Creek

$Q = .039 \text{ MGD} = .0254 \text{ cfs}$

assuming $V = 0.5$ fps

$k_1 (20°C) = 0.1$

$k_2 = 0.3$

$T = 27°C$

$k_1 (27°C) = .1 (1.047)^7 = .138$

$BOD_5 \text{ eff} = 30 \text{ mg/l} \Rightarrow BOD_{ult} = 38 \text{ mg/l}$

$C_s \, @ (27°C) = 8.0$

try DO_{eff} of 5.5 mg/l

$$D_1 = \frac{k_1 L}{k_2 - k_1} \left(10^{-k_1 t} - 10^{-k_2 t} \right) + D_0 10^{-k_2 t}$$

$t = 0.13$ days

$$D_1 = \frac{.14 (38)}{.16} \left(.96 - .914 \right) + 2.5 (.914)$$

$D_1 = 33.2 (.046) + 2.28$

$D_1 = 1.52 + 2.28 = 3.8$

$D.O. = 8 - 3.8 = 4.2$

try $D.O._{eff} = 6.0$

$D.O._{stream} = 4.7 +$ Close enough to 5

$D.O._{eff} = 6.0 \text{ mg/l}$

~~Red Carpet~~ Days Inn Streeter Phillips DO Model

DO (Limit)	Cs (DO)	Q (cfs)	k2	K1 @20 C
6.00	8.00	0.039	0.3	0.138
L (BOD5)	**T C**	**V (ft/s)**		
38	27.00	0.5		

Distance from Discharge (Miles)	Time from Discharge (Days) t	DO Deficient D1	DO (mg/l)
0	0	2	6.00000
0.1	0.0122222	2.12985914	5.87014
0.2	0.0244444	2.25805798	5.74194
0.3	0.0366667	2.3846127	5.61539
0.4	0.0488889	2.5095393	5.49046
0.5	0.0611111	2.63285367	5.36715
0.6	0.0733333	2.75457153	5.24543
0.7	0.0855555	2.87470848	5.12529
0.8	0.0977778	2.99327997	5.00672
0.9	0.11	3.11030132	4.88970
1	0.1222222	3.22578769	4.77421
1.05	0.1283333	3.28295998	4.71704
1.05	**0.13**	**3.30**	**4.70151**

Bolded numbers represent output from hand calculations on previous page.

Effluent DO of 6.0 mg/l results in violation of water quality stream standard 5.0 mg/l.

Days ~~Red Carpet~~ Inn Streeter Phillips DO Model

DO (Limit)	Cs (DO)	Q (cfs)	k2	K1 @20 C
6.30	8.00	0.039	0.3	0.138
L (BOD5)	**T C**	**V (ft/s)**		
38	27.00	0.5		

Distance from Discharge (Miles)	Time from Discharge (Days) t	DO Deficient D1	DO (mg/l)
0	0	1.7	6.30000
0.1	0.0122222	1.83238132	6.16762
0.2	0.0244444	1.96308114	6.03692
0.3	0.0366667	2.0921158	5.90788
0.4	0.0488889	2.21950151	5.78050
0.5	0.0611111	2.3452543	5.65475
0.6	0.0733333	2.46939009	5.53061
0.7	0.0855555	2.59192464	5.40808
0.8	0.0977778	2.71287357	5.28713
0.9	0.11	2.83225237	5.16775
1	0.1222222	2.95007638	5.04992
1.05	0.1283333	3.00841009	4.99159
1.05	**0.13**	**3.02**	**4.97575**

Bolded numbers represent output from hand calculations on previous page.

Effluent DO of 6.3 mg/l results in violation of water quality stream standard 5.0 mg/l.

Days Red Carpet Inn Streeter Phillips DO Model

DO (Limit)	Cs (DO)	Q (cfs)	k2	K1 @20 C
6.40	8.00	0.039	0.3	0.138
L (BOD5)	**T C**	**V (ft/s)**		
38	27.00	0.5		

Distance from Discharge (Miles)	Time from Discharge (Days) t	DO Deficient D1	DO (mg/l)
0	0	1.6	6.40000
0.1	0.0122222	1.73322204	6.26678
0.2	0.0244444	1.86475552	6.13524
0.3	0.0366667	1.99461684	6.00538
0.4	0.0488889	2.12282224	5.87718
0.5	0.0611111	2.24938785	5.75061
0.6	0.0733333	2.37432961	5.62567
0.7	0.0855555	2.49766336	5.50234
0.8	0.0977778	2.61940477	5.38060
0.9	0.11	2.73956938	5.26043
1	0.1222222	2.8581726	5.14183
1.05	0.1283333	2.91689347	5.08311
1.05	**0.13**	**2.93**	**5.06716**

Bolded numbers represent output from hand calculations on previous page.

Effluent DO of 6.4 mg/l does not violate the water quality stream standard 5.0 mg/l.

Attachment H

Public Notice

PUBLIC NOTICE – Environmental Permit

PURPOSE OF NOTICE: To seek public comment on a draft permit from the Department of Environmental Quality that will allow the release of treated wastewater into a water body in Pulaski County.
PUBLIC COMMENT PERIOD: 30 days following the public notice issue date; comment period ends 4:30 pm of last day
PERMIT NAME: Virginia Pollutant Discharge Elimination System – Wastewater issued by DEQ, under the authority of the State Water Control Board
NAME, ADDRESS, AND PERMIT NUMBER OF APPLICANT: Shree Ganesh LLC, PO Box 1266, Pulaski, VA 24301, VA0060321
NAME AND ADDRESS OF FACILITY: Days Inn WWTP, PO Box 1266, Pulaski, VA 24301
PROJECT DESCRIPTION: Days Inn WWTP has applied for a reissuance of a permit for the wastewater treatment plant in Pulaski County. The applicant proposes to release treated sewage at a rate of 0.039 MGD from the current facility into a water body. Sludge from the treatment process will be hauled to a local wastewater treatment plant. The facility proposes to release the treated sewage into the Peak Creek Watershed (VAW-L17R). A watershed is the land area drained by a river and its incoming streams. The permit will limit the following pollutants to amounts that protect water quality: nutrients, organic matter, solids.
HOW TO COMMENT: DEQ accepts comments by e-mail, fax, or postal mail. All comments must be in writing and be received by DEQ during the comment period. The public also may request a public hearing.
WRITTEN COMMENTS MUST INCLUDE: DEQ accepts comments by e-mail, fax, or postal mail. All comments must be in writing and be received by DEQ during the comment period. Written comments must include: 1) The names, mailing addresses, and telephone numbers of the person commenting and of all people represented by the citizen. 2) If a public hearing is requested, the reason for holding a hearing, including associated concerns. 3) A brief, informal statement regarding the extent of the interest of the person commenting, including how the operation of the facility or activity affects the citizen. DEQ may hold a public hearing, including another comment period, if a public response is significant and there are substantial, disputed issues relevant to the proposed permit. The public may review the draft permit and application at the DEQ office named below.
CONTACT OF PUBLIC COMMENTS, DOCUMENT REQUESTS, AND ADDITIONAL INFORMATION:
NAME: Becky L. France; ADDRESS: Virginia Department of Environmental Quality, West Central Regional Office, 3019 Peters Creek Road, Roanoke, VA 24019-2738; PHONE: (540) 562-6700; E-MAIL ADDRESS: blfrance@deq.virginia.gov; FAX: (540) 562-6860

Attachment I

EPA Review Checksheet

Revised 2/2003

State "FY2003 Transmittal Checklist" to Assist in Targeting Municipal and Industrial Individual NPDES Draft Permits for Review

Part I. State Draft Permit Submission Checklist

In accordance with the MOA established between the Commonwealth of Virginia and the United States Environmental Protection Agency, Region III, the Commonwealth submits the following draft National Pollutant Discharge Elimination System (NPDES) permit for Agency review and concurrence.

Facility Name: Days Inn WWTP

NPDES Permit Number: VA0060321

Permit Writer Name: Becky L. France

Date: 12/6/07

Major [ ] **Minor [X]** **Industrial [ ]** **Municipal [X]**

I.A. Draft Permit Package Submittal Includes:	Yes	No	N/A
1. Permit Application?	X		
2. Complete Draft Permit (for renewal or first time permit – entire permit, including boilerplate information)?	X		
3. Copy of Public Notice?		X	
4. Complete Fact Sheet?	X		
5. A Priority Pollutant Screening to determine parameters of concern?			X
6. A Reasonable Potential analysis showing calculated WQBELs?	X		
7. Dissolved Oxygen calculations?	X		
8. Whole Effluent Toxicity Test summary and analysis?			X
9. Permit Rating Sheet for new or modified industrial facilities?			X

I.B. Permit/Facility Characteristics	Yes	No	N/A
1. Is this a new, or currently unpermitted facility?		X	
2. Are all permissible outfalls (including combined sewer overflow points, non-process water and storm water) from the facility properly identified and authorized in the permit?	X		
3. Does the fact sheet **or** permit contain a description of the wastewater treatment process?	X		

I.B. Permit/Facility Characteristics – cont. (FY2003)	Yes	No	N/A
4. Does the review of PCS/DMR data for at least the last 3 years indicate significant non-compliance with the existing permit?		X	
5. Has there been any change in streamflow characteristics since the last permit was developed?		X	
6. Does the permit allow the discharge of new or increased loadings of any pollutants?		X	
7. Does the fact sheet **or** permit provide a description of the receiving water body(s) to which the facility discharges, including information on low/critical flow conditions and designated/existing uses?	X		
8. Does the facility discharge to a 303(d) listed water?		X	
a. Has a TMDL been developed and approved by EPA for the impaired water?			X
b. Does the record indicate that the TMDL development is on the State priority list and will most likely be developed within the life of the permit?			X
c. Does the facility discharge a pollutant of concern identified in the TMDL or 303(d) listed water?			X
9. Have any limits been removed, or are any limits less stringent, than those in the current permit?		X	
10. Does the permit authorize discharges of storm water?			X
11. Has the facility substantially enlarged or altered its operation or substantially increased its flow or production?		X	
12. Are there any production-based, technology-based effluent limits in the permit?		X	
13. Do any water quality-based effluent limit calculations differ from the State's standard policies or procedures?		X	
14. Are any WQBELs based on an interpretation of narrative criteria?		X	
15. Does the permit incorporate any variances or other exceptions to the State's standards or regulations?		X	
16. Does the permit contain a compliance schedule for any limit or condition?	X		
17. Is there a potential impact to endangered/threatened species or their habitat by the facility's discharge(s)?		X	
18. Have impacts from the discharge(s) at downstream potable water supplies been evaluated?			X
19. Is there any indication that there is significant public interest in the permit action proposed for this facility?		X	
20. Have previous permit, application, and fact sheet been examined?	X		

Part II. NPDES Draft Permit Checklist (FY2003)

Region III NPDES Permit Quality Checklist – for POTWs

(To be completed and included in the record only for POTWs)

II.A. Permit Cover Page/Administration	Yes	No	N/A
1. Does the fact sheet or permit describe the physical location of the facility, including latitude and longitude (not necessarily on permit cover page)?	X		
2. Does the permit contain specific authorization-to-discharge information (from where to where, by whom)?	X		

II.B. Effluent Limits – General Elements	Yes	No	N/A
1. Does the fact sheet describe the basis of final limits in the permit (e.g., that a comparison of technology and water quality-based limits was performed, and the most stringent limit selected)?	X		
2. Does the fact sheet discuss whether "antibacksliding" provisions were met for any limits that are less stringent than those in the previous NPDES permit?			X

II.C. Technology-Based Effluent Limits (POTWs)	Yes	No	N/A
1. Does the permit contain numeric limits for ALL of the following: BOD (or alternative, e.g., CBOD, COD, TOC), TSS, and pH?	X		
2. Does the permit require at least 85% removal for BOD (or BOD alternative) and TSS (or 65% for equivalent to secondary) consistent with 40 CFR Part 133?	X		
a. If no, does the record indicate that application of WQBELs, or some other means, results in more stringent requirements than 85% removal or that an exception consistent with 40 CFR 133.103 has been approved?			X
3. Are technology-based permit limits expressed in the appropriate units of measure (e.g., concentration, mass, SU)?	X		
4. Are permit limits for BOD and TSS expressed in terms of both long term (e.g., average monthly) and short term (e.g., average weekly) limits?	X		
5. Are any concentration limitations in the permit less stringent than the secondary treatment requirements (30 mg/l BOD5 and TSS for a 30-day average and 45 mg/l BOD5 and TSS for a 7-day average)?		X	
a. If yes, does the record provide a justification (e.g., waste stabilization pond, trickling filter, etc.) for the alternate limitations?			X

II.D. Water Quality-Based Effluent Limits	Yes	No	N/A
1. Does the permit include appropriate limitations consistent with 40 CFR 122.44(d) covering State narrative and numeric criteria for water quality?	X		
2. Does the fact sheet indicate that any WQBELs were derived from a completed and EPA approved TMDL?			X

II.D. Water Quality-Based Effluent Limits – cont. (FY2003)	Yes	No	N/A
3. Does the fact sheet provide effluent characteristics for each outfall?	X		
4. Does the fact sheet document that a "reasonable potential" evaluation was performed?	X		
a. If yes, does the fact sheet indicate that the "reasonable potential" evaluation was performed in accordance with the State's approved procedures?	X		
b. Does the fact sheet describe the basis for allowing or disallowing in-stream dilution or a mixing zone?	X		
c. Does the fact sheet present WLA calculation procedures for all pollutants that were found to have "reasonable potential"?	X		
d. Does the fact sheet indicate that the "reasonable potential" and WLA calculations accounted for contributions from upstream sources (i.e., do calculations include ambient/background concentrations)?			X
e. Does the permit contain numeric effluent limits for all pollutants for which "reasonable potential" was determined?	X		
5. Are all final WQBELs in the permit consistent with the justification and/or documentation provided in the fact sheet?	X		
6. For all final WQBELs, are BOTH long-term AND short-term effluent limits established?	X		
7. Are WQBELs expressed in the permit using appropriate units of measure (e.g., mass, concentration)?	X		
8. Does the record indicate that an "antidegradation" review was performed in accordance with the State's approved antidegradation policy?	X		

II.E. Monitoring and Reporting Requirements	Yes	No	N/A
1. Does the permit require at least annual monitoring for all limited parameters and other monitoring as required by State and Federal regulations?	X		
a. If no, does the fact sheet indicate that the facility applied for and was granted a monitoring waiver, AND, does the permit specifically incorporate this waiver?			X
2. Does the permit identify the physical location where monitoring is to be performed for each outfall?	X		
3. Does the permit require at least annual influent monitoring for BOD (or BOD alternative) and TSS to assess compliance with applicable percent removal requirements?		X	
4. Does the permit require testing for Whole Effluent Toxicity?		X	

II.F. Special Conditions	Yes	No	N/A
1. Does the permit include appropriate biosolids use/disposal requirements?	X		
2. Does the permit include appropriate storm water program requirements?			X

II.F. Special Conditions – cont. (FY2003)	Yes	No	N/A
3. If the permit contains compliance schedule(s), are they consistent with statutory and regulatory deadlines and requirements?	X		
4. Are other special conditions (e.g., ambient sampling, mixing studies, TIE/TRE, BMPs, special studies) consistent with CWA and NPDES regulations?	X		
5. Does the permit allow/authorize discharge of sanitary sewage from points other than the POTW outfall(s) or CSO outfalls [i.e., Sanitary Sewer Overflows (SSOs) or treatment plant bypasses]?			X
6. Does the permit authorize discharges from Combined Sewer Overflows (CSOs)?			X
a. Does the permit require implementation of the "Nine Minimum Controls"?			X
b. Does the permit require development and implementation of a "Long Term Control Plan"?			X
c. Does the permit require monitoring and reporting for CSO events?			X
7. Does the permit include appropriate Pretreatment Program requirements?			X

II.G. Standard Conditions	Yes	No	N/A
1. Does the **permit** contain all 40 CFR 122.41 standard conditions or the State equivalent (or more stringent) conditions?	X		

List of Standard Conditions – 40 CFR 122.41

Duty to comply	Property rights	Reporting Requirements
Duty to reapply	Duty to provide information	Planned change
Need to halt or reduce activity not a defense	Inspections and entry	Anticipated noncompliance
Duty to mitigate	Monitoring and records	Transfers
Proper O & M	Signatory requirement	Monitoring reports
Permit actions	Bypass	Compliance schedules
	Upset	24-Hour reporting
		Other non-compliance

2. Does the permit contain the additional standard condition (or the State equivalent or more stringent conditions) for POTWs regarding notification of new introduction of pollutants and new industrial users [40 CFR 122.42(b)]?		X	

Part II. NPDES Draft Permit Checklist (FY2003)

Region III NPDES Permit Quality Review Checklist – For Non-Municipals

(To be completed and included in the record for all non-POTWs)

II.A. Permit Cover Page/Administration	Yes	No	N/A
1. Does the fact sheet **or** permit describe the physical location of the facility, including latitude and longitude (not necessarily on permit cover page)?			
2. Does the permit contain specific authorization-to-discharge information (from where to where, by whom)?			

II.B. Effluent Limits – General Elements	Yes	No	N/A
1. Does the fact sheet describe the basis of final limits in the permit (e.g., that a comparison of technology and water quality-based limits was performed, and the most stringent limit selected)?			
2. Does the fact sheet discuss whether "antibacksliding" provisions were met for any limits that are less stringent than those in the previous NPDES permit?			

II.C. Technology-Based Effluent Limits (Effluent Guidelines & BPJ)	Yes	No	N/A
1. Is the facility subject to a national effluent limitations guideline (ELG)?			
a. If yes, does the record adequately document the categorization process, including an evaluation of whether the facility is a new source or an existing source?			
b. If no, does the record indicate that a technology-based analysis based on Best Professional Judgement (BPJ) was used for all pollutants of concern discharged at treatable concentrations?			
2. For all limits developed based on BPJ, does the record indicate that the limits are consistent with the criteria established at 40 CFR 125.3(d)?			
3. Does the fact sheet adequately document the calculations used to develop both ELG and /or BPJ technology-based effluent limits?			
4. For all limits that are based on production or flow, does the record indicate that the calculations are based on a "reasonable measure of ACTUAL production" for the facility (not design)?			
5. Does the permit contain "tiered" limits that reflect projected increases in production or flow?			
a. If yes, does the permit require the facility to notify the permitting authority when alternate levels of production or flow are attained?			
6. Are technology-based permit limits expressed in appropriate units of measure (e.g., concentration, mass, SU)?			

II.C. Technology-Based Effluent Limits (Effluent Guidelines & BPJ) – cont.	Yes	No	N/A
7. Are all technology-based limits expressed in terms of both maximum daily, weekly average, and/or monthly average limits?			
8. Are any final limits less stringent than required by applicable effluent limitations guidelines or BPJ?			

II.D. Water Quality-Based Effluent Limits	Yes	No	N/A
1. Does the permit include appropriate limitations consistent with 40 CFR 122.44(d) covering State narrative and numeric criteria for water quality?			
2. Does the record indicate that any WQBELs were derived from a completed and EPA approved TMDL?			
3. Does the fact sheet provide effluent characteristics for each outfall?			
4. Does the fact sheet document that a "reasonable potential" evaluation was performed?			
a. If yes, does the fact sheet indicate that the "reasonable potential" evaluation was performed in accordance with the State's approved procedures?			
b. Does the fact sheet describe the basis for allowing or disallowing in-stream dilution or a mixing zone?			
c. Does the fact sheet present WLA calculation procedures for all pollutants that were found to have "reasonable potential"?			
d. Does the fact sheet indicate that the "reasonable potential" and WLA calculations accounted for contributions from upstream sources (i.e., do calculations include ambient/background concentrations where data are available)?			
e. Does the permit contain numeric effluent limits for all pollutants for which "reasonable potential" was determined?			
5. Are all final WQBELs in the permit consistent with the justification and/or documentation provided in the fact sheet?			
6. For all final WQBELs, are BOTH long-term (e.g., average monthly) AND short-term (e.g., maximum daily, weekly average, instantaneous) effluent limits established?			
7. Are WQBELs expressed in the permit using appropriate units of measure (e.g., mass, concentration)?			
8. Does the fact sheet indicate that an "antidegradation" review was performed in accordance with the State's approved antidegradation policy?			

II.E. Monitoring and Reporting Requirements (FY2003)	Yes	No	N/A
1. Does the permit require at least annual monitoring for all limited parameters?			
a. If no, does the fact sheet indicate that the facility applied for and was granted a monitoring waiver, AND, does the permit specifically incorporate this waiver?			
2. Does the permit identify the physical location where monitoring is to be performed for each outfall?			
3. Does the permit require testing for Whole Effluent Toxicity in accordance with the State's standard practices?			

II.F. Special Conditions	Yes	No	N/A
1. Does the permit require development and implementation of a Best Management Practices (BMP) plan or site-specific BMPs?			
a. If yes, does the permit adequately incorporate and require compliance with the BMPs?			
2. If the permit contains compliance schedule(s), are they consistent with statutory and regulatory deadlines and requirements?			
3. Are other special conditions (e.g., ambient sampling, mixing studies, TIE/TRE, BMPs, special studies) consistent with CWA and NPDES regulations?			

II.G. Standard Conditions	Yes	No	N/A
1. Does the **permit** contain all 40 CFR 122.41 standard conditions or the State equivalent (or more stringent) conditions?			

List of Standard Conditions – 40 CFR 122.41

Duty to comply
Duty to reapply
Need to halt or reduce activity not a defense
Duty to mitigate
Proper O & M
Permit actions
Property rights
Duty to provide information
Inspections and entry
Monitoring and records
Signatory requirement
Bypass
Upset
Reporting Requirements
Planned change
Anticipated noncompliance
Transfers
Monitoring reports
Compliance schedules
24-Hour reporting
Other non-compliance

2. Does the permit contain the additional standard condition (or the State equivalent or more stringent conditions) for existing non-municipal dischargers regarding pollutant notification levels [40 CFR 122.42(a)]?			

Part III. Signature Page (FY2003)

Based on a review of the data and other information submitted by the permit applicant, and the draft permit and other administrative records generated by the Department/Division and/or made available to the Department/Division, the information provided on this checklist is accurate and complete, to the best of my knowledge.

Name	Becky L. France
Title	Environmental Engineer Senior
Signature	Becky L. France
Date	12/6/07